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## INFLUENZA—PREVALENCE IN THE UNITED STATES.

Influenza prevalence may be said to be approaching normal proportions again in the country as a whole. While cases continue to be reported in many States, there is reason to believe that a large proportion of the reports for the week ended March 20 are belated returns, and some cases, of course, may be expected at this season of the year. In some States, however, the prevalence of the disease is still definitely above normal, and in several of the large cities for which weekly mortality data are given in the Weekly Health Index of the Bureau of the Census the mortality rate from influenza and pneumonia was still above the seasonal normal—notably Birmingham and New Orleans.

The morbidity reports furnished by State health departments to the Public Health Service for the week ended March 20 show a continued decline in the number of cases reported except for two States. The mortality reports furnished by the Bureau of the Census show for the forty-odd large cities as a group that the excess death rate from influenza and pneumonia (all forms) declined to 9 per 100,000, practically a normal rate, as contrasted with an excess rate of 526 per 100,000 in the corresponding week of the 1918 epidemic. The excess rates for 12 weeks' period ended March 20, 1920, compared with those of the 1918 epidemic, are shown in the following table:

TABLE I.—Comparison of the excess<sup>1</sup> annual mortality rate per 100,000 from influenza and pneumonia (all forms) by weeks during the 1920 epidemic with that for corresponding weeks in the 1918 epidemic in cities included in the Weekly Health Index of the Bureau of the Census, considered as a whole.

Week ended—	Excess over corresponding week of median year.	Week ended—	Excess over corresponding week of median year.
1918.		1920.	
Sept. 14	—6	Jan. 3	—56
21	76	10	—55
28	326	17	—27
Oct. 5	1,028	24	184
12	2,557	31	741
19	4,592	Feb. 7	1,241
26	4,695	14	1,319
Nov. 2	3,332	21	867
9	1,832	28	422
16	989	Mar. 6	185
23	620	13	69
30	526	20	9
Dec. 7	617		
14	792		
21	801		
28	629		

<sup>1</sup> Excess over the mortality rate from the same causes in corresponding week of the median year in the period 1910-1916. The weekly rates for the median year have been approximated by plotting the rate for the median year for each month (thus affording a rough "normal" seasonal curve) for each city, and then by reading from the curve the indicated median rate at the midpoint for each week. The excess has been found by subtracting this median rate from the actual rate for the corresponding weeks in 1918-1920.

If the curves of excess rates by weeks in the two epidemic waves be fitted together at their peaks (Oct. 26, 1912, to correspond with Feb. 14, 1920) and the ratios be computed of the 1920 rates to those for the corresponding weeks in the 1918 wave, the more abrupt decline of the 1920 epidemic is clearly shown.<sup>1</sup>

The ratios follow:

*Weekly ratio of excess annual death rate from influenza and pneumonia (all forms), Jan. 11-Mar. 20, 1920, to that of corresponding week of 1918 epidemic wave, for certain cities as a group.*

Week ended—		Ratio.
1918	1920	
Sept. 28	Jan. 17	0.086
Oct. 5	24	.232
12	31	.311
19	Feb. 7	.282
26	14	.293
Nov. 2	21	.277
9	28	.260
16	Mar. 6	.243
23	13	.200
30	20	.122

As may be noted in Table II, the excess mortality rate from influenza and pneumonia (all forms) in a few cities exhibits a tendency to rise slightly. These increases can not be considered significant as yet, since they do not represent more than a very small number of deaths—not over four or five in any of the cities concerned. No definite indications of recrudescences or secondary epidemic waves are afforded at this time. It is quite probable that slight excess rates will continue in some of the cities for another two or three weeks, even if no definite secondary epidemic waves are manifested.

<sup>1</sup> In computing these ratios, account has been taken of the fact that the death rates from influenza and pneumonia (all forms) immediately prior to the beginning of the present epidemic have been below "normal" (using the seasonal rate for the median year of 1910-1916 as the normal), and a provisional adjustment to the 1920 "norm" has been made by adding 55 to the annual rate (as given in Table I) for each week of the epidemic period in 1920.

TABLE II.—Excess of annual death rates per 100,000 from influenza and pneumonia (all forms) by weeks, Dec. 20, 1919, to Mar. 20, 1920, over that in corresponding week of median year (1910-1916), in certain large cities.<sup>1</sup>

City.	1919: Week ended—		1920: Week ended—											
	December.		January.					February.				March.		
	20	27	3	10	17	24	31	7	14	21	28	6	13	20
Albany, N. Y.	0	2	-54	-251	-314	-367	250	493	980	719	602	162	139	-126
Atlanta, Ga.	<sup>2</sup> -36	<sup>2</sup> -100	<sup>2</sup> -85	<sup>2</sup> 209	<sup>2</sup> 33	<sup>2</sup> 30	149	574	<sup>2</sup> 1,482	<sup>2</sup> 1,998	<sup>2</sup> 1,381	( <sup>3</sup> )	317	<sup>2</sup> 159
Baltimore, Md.	-41	-97	-106	-204	-96	-180	101	604	1,745	1,457	613	265	138	-105
Birmingham, Ala.	-9	-62	-5	-1	-83	115	44	243	131	1,210	1,502	1,666	860	508
Boston, Mass.	( <sup>3</sup> )	-122	-131	-113	-114	-1	266	753	1,399	1,137	600	223	9	-63
Buffalo, N. Y.	-124	-48	-69	-102	-134	-3	-27	522	1,334	1,372	847	377	173	14
Cambridge, Mass.	-46	-151	-68	111	62	107	391	771	1,058	824	350	-82	-44	-1
Chicago, Ill.	-67	-87	-102	-118	-37	604	1,886	1,681	660	158	-55	-85	-107	-82
Cincinnati, Ohio.	-12	-4	-8	-71	-108	-54	41	199	497	734	959	637	152	195
Cleveland, Ohio.	-36	-92	0	-41	-13	-6	91	813	1,483	954	609	251	154	117
Columbus, Ohio.	-57	-151	-103	130	-6	-27	322	1,156	2,519	1,309	883	203	83	-32
Dayton, Ohio.	-20	-159	51	-101	11	249	1,567	1,611	1,017	704	25	-35	15	142
Fall River, Mass.	-2	-106	-128	5	99	-141	-272	-232	200	563	322	291	143	119
Grand Rapids, Mich.	60	-33	-15	-105	2	-79	77	1,047	1,285	1,095	356	262	13	-66
Indianapolis, Ind.	46	42	<sup>2</sup> -168	62	<sup>2</sup> 11	101	587	1,419	2,004	1,071	654	500	111	160
Jersey City, N. J.	-214	35	-90	-64	-67	98	755	( <sup>3</sup> )	( <sup>2</sup> )	989	317	169	88	9
Kansas City, Mo.	( <sup>3</sup> )	-12	-31	-31	221	1,320	1,708	3,362	2,475	930	595	216	139	341
Los Angeles, Calif.	-18	-118	-16	-39	-23	-13	19	211	646	534	391	330	77	95
Louisville, Ky.	-100	-20	-12	-3	-13	-41	151	620	874	778	375	142	91	-40
Lowell, Mass.	-144	-28	-145	-66	-122	-220	27	283	207	1,457	1,127	1,038	516	89
Memphis, Tenn.	-6	-24	193	81	74	41	10	419	1,836	1,733	1,224	1,082	472	237
Milwaukee, Wis.	87	11	3	111	<sup>2</sup> -32	332	1,434	1,927	1,201	276	364	-46	-80	<sup>2</sup> -37
Minneapolis, Minn.	10	-20	88	-41	-84	-106	679	2,065	1,494	538	11	-44	101	<sup>4</sup> -113
Nashville, Tenn.	9	-126	-130	-47	169	-55	193	-17	613	1,638	2,280	1,007	703	277
Newark, N. J.	-121	-136	-77	-64	-106	91	408	1,168	1,503	911	478	158	11	101
New Haven, Conn.	-3	-120	0	-222	-169	103	208	271	1,630	1,902	181	377	168	99
New Orleans, La.	-101	9	-36	67	50	35	92	141	492	860	<sup>4</sup> 157	<sup>4</sup> 30	486	429
New York, N. Y.	-82	-75	-61	-42	-4	241	1,032	1,705	1,505	689	206	53	-6	-41
Oakland, Calif.	-113	-66	-16	-84	21	395	431	1,196	1,185	1,341	396	303	354	<sup>4</sup> -11
Omaha, Nebr.	-76	89	-117	-151	-70	95	1,007	1,488	1,512	1,616	567	261	<sup>2</sup> 48	( <sup>3</sup> )
Philadelphia, Pa.	-25	-122	-76	-116	-64	29	163	567	1,384	1,551	822	362	177	12
Pittsburgh, Pa.	-60	-29	120	31	75	89	280	1,099	3,297	2,182	1,322	5.6	265	38
Providence, R. I.	-9	-8	-127	-34	-33	-143	-32	457	1,421	1,498	803	408	-25	-2
Richmond, Va.	-246	-238	-130	-280	-70	-74	308	761	857	531	46	-113	-143	-172
Rochester, N. Y.	-60	-96	-41	38	-87	11	235	778	824	334	176	36	95	-42
St. Louis, Mo.	-29	-45	15	72	-39	177	1,278	2,399	1,628	618	156	-16	-36	-38
St. Paul, Minn.	24	-5	-12	79	( <sup>3</sup> )	364	<sup>4</sup> 893	1,465	1,125	376	131	-55	44	( <sup>3</sup> )
San Francisco, Calif.	-94	-57	-4	-68	67	319	462	1,091	1,341	1,081	819	428	182	82
Syracuse, N. Y.	-104	17	10	100	59	115	784	2,651	2,291	707	515	131	-26	201
Toledo, Ohio.	36	-70	19	24	-17	-12	156	865	780	776	299	80	42	-199
Washington, D. C.	82	-46	175	34	89	782	2,072	1,845	901	409	68	-41	-93	-69
Worcester, Mass.	-26	-54	-117	1	-50	-123	79	104	973	1,215	679	1,435	208	34

<sup>1</sup> The weekly rates for the median year in the period (1910-1916) have been approximated by plotting the rate for the median year for each month (thus affording a rough "normal" seasonal curve) for each city, and then by reading from the curve the indicated median rate at the midpoint for each week. The excess has been found by subtracting this median rate from the actual rate for each week in 1920. When the difference is "minus" it is so indicated.

<sup>2</sup> For pneumonia only.

<sup>3</sup> No report.

<sup>4</sup> For influenza only.

The number of deaths from influenza and pneumonia (all forms) by weeks during the present epidemic for the cities included in the foregoing tabulation, as furnished by the vital statistics division of the Bureau of the Census, is given in the table following:

TABLE III.—Deaths from influenza and pneumonia (all forms) in certain large cities, by weeks, in December, 1919, and in January, February, and March, 1920.

City.	1919: Week ended—		1920: Week ended—															
	December.		January.						February.				March.					
	20	27	3	10	17	24	31		7	14	21	28	6	13	20			
Albany, N. Y.	5	6	6	3	2	3	14	19	29	23	20	10	9	3				
Atlanta, Ga.	19	16	16	17	110	110	15	32	168	189	166	(?)	26	120				
Baltimore, Md.	32	28	30	20	35	24	59	122	268	231	123	80	65	34				
Birmingham, Ala.	11	9	11	11	18	16	14	22	18	59	70	76	45	31				
Boston, Mass.	20	23	24	28	28	45	85	158	255	216	136	80	48	37				
Buffalo, N. Y.	8	15	13	10	7	19	17	67	141	145	98	56	38	24				
Cambridge, Mass.	4	2	4	8	7	8	14	22	28	23	13	4	5	6				
Chicago, Ill.	92	93	98	107	133	472	1,109	1,005	494	243	136	120	108	118				
Cincinnati, Ohio.	15	17	18	14	12	17	25	38	62	81	99	73	34	37				
Cleveland, Ohio.	23	14	28	21	25	26	41	158	258	177	125	71	57	52				
Columbus, Ohio.	7	3	5	15	9	8	22	59	118	66	48	19	14	9				
Dayton, Ohio.	5	1	7	4	7	13	46	47	32	24	7	5	6	9				
Denver, Colo.	10	11	15	21	18	24	49	159	160	67	44	21	10	(?)				
Detroit, Mich.	(2)	(2)	(2)	(2)	(2)	(2)	324	740	481	185	101	78	84	56				
Fall River, Mass.	5	3	3	7	10	5	3	5	16	25	19	18	14	13				
Grand Rapids, Mich.	4	2	3	1	4	2	6	31	37	32	14	11	5	3				
Indianapolis, Ind.	12	13	13	18	16	21	36	92	124	72	49	41	20	23				
Jersey City, N. J.	13	19	12	14	14	24	64	(2)	(2)	78	37	28	23	18				
Kansas City, Mo.	(2)	12	12	13	20	96	120	220	167	74	53	29	23	34				
Los Angeles, Calif.	16	6	18	16	18	19	22	42	88	74	57	49	20	21				
Louisville, Ky.	4	10	9	10	10	9	18	40	52	48	30	20	18	12				
Lowell, Mass.	2	5	3	5	4	2	7	12	10	36	29	27	16	7				
Memphis, Tenn.	8	8	15	12	12	11	10	22	64	61	46	42	21	17				
Milwaukee, Wis.	21	15	15	25	13	45	141	184	121	41	31	16	14	18				
Minneapolis, Minn.	11	10	20	12	10	9	63	168	125	53	13	8	18	2				
Nashville, Tenn.	7	4	4	6	11	6	12	8	23	47	62	33	26	16				
Newark, N. J.	9	9	15	17	14	30	55	116	142	93	54	34	24	32				
New Haven, Conn.	8	6	11	6	8	10	19	20	60	68	31	23	17	15				
New Orleans, La.	11	20	18	27	27	27	32	36	62	89	37	27	59	53				
New York, N. Y.	162	175	195	218	261	511	1,308	1,988	1,796	987	513	369	317	284				
Oakland, Calif.	3	5	7	4	8	20	24	55	54	60	21	17	19	21				
Omaha, Nebr.	6	12	5	4	7	13	45	62	63	32	28	19	11	(?)				
Philadelphia, Pa.	69	43	64	55	75	108	153	289	504	620	373	217	153	95				
Pittsburgh, Pa.	31	36	55	47	53	55	76	168	417	290	193	105	77	52				
Portland, Oreg.	19	15	14	13	18	19	115	21	57	52	41	28	13	(?)				
Providence, R. I.	10	11	6	12	13	8	14	39	88	92	57	37	15	16				
Richmond, Va.	1	2	6	2	9	6	21	35	38	28	13	8	7	6				
Rochester, N. Y.	5	4	8	13	7	12	23	50	52	27	19	12	15	8				
St. Louis, Mo.	33	35	47	57	41	73	296	401	282	129	60	35	33	33				
St. Paul, Minn.	8	7	7	4	(?)	26	52	80	63	26	14	5	10	(?)				
San Francisco, Calif.	11	15	20	14	26	48	59	115	137	113	89	54	32	23				
Seattle, Wash.	7	7	9	12	4	7	12	32	98	78	59	34	15	8				
Spokane, Wash.	5	2	0	4	3	3	12	32	64	33	17	10	7	10				
Syracuse, N. Y.	2	6	6	9	8	10	31	89	78	29	23	11	6	13				
Toledo, Ohio.	8	3	8	9	8	9	18	54	50	50	26	15	13	5				
Washington, D. C.	23	14	32	22	27	81	181	164	92	55	30	23	20	22				
Worcester, Mass.	6	6	5	10	9	7	14	15	44	52	34	59	18	12				

<sup>1</sup> Deaths from pneumonia (all forms) only.

<sup>2</sup> No report.

<sup>3</sup> Deaths from influenza only.

The number of cases of influenza in the different States, as reported to the Public Health Service by State health departments, is shown in Table IV.

TABLE IV.—*Influenza case reports. Number of cases of influenza occurring in various States as reported to the Public Health Service by State health departments.*

[States omitted are those from which no reports have been received. Blank spaces indicate that no report was received for the week. These reports are preliminary and subject to change.]

State.	Cases reported week ended—								
	January.		February.				March.		
	24	31	7	14	21	28	6	13	20
Alabama.....	8	203	1,296	3,236	2,366	3,603	3,885	1,047	829
Arkansas.....	179	595	5,696	6,599	2,793	1,690	2,576	2,055	835
California.....	1,604	7,133	13,660	11,887	7,420	5,527	918	496	582
Connecticut.....	1,123	4,684	5,696	4,898	2,771	1,183	571	229	121
Delaware.....	5	21	83	78	43	36	50	33	13
District of Columbia.....	1,216	1,616	557	298	104	36	21	6	6
Florida.....	484	1,547	1,581	1,735	1,420	1,026	580	413	298
Georgia.....	95	617	3,256	5,411	7,809	8,210	3,677	3,087	2,066
Idaho.....	922	2,783	2,394						
Illinois.....	14,905	29,156	30,330	23,037	7,237	3,052	1,344	453	430
Indiana.....	1,714		7,811	7,503	3,904	2,038	1,289	1,184	412
Iowa.....	644	3,960	5,070	1,981	859	170	85	96	22
Kansas.....	1,130	8,582	16,960	17,699	10,026	3,590	3,332	1,551	1,290
Kentucky.....	170	878	2,536	6,067	4,235	8,584	4,099	3,640	
Louisiana.....	123	763	1,901	3,690	3,153	3,363	2,541	1,982	1,045
Maine.....		387	936	3,942	3,702	2,134	1,130	1,105	848
Maryland.....			4,935	8,942	4,758	3,184	2,052	1,293	747
Massachusetts.....	489	4,475	9,730	10,727	5,601	2,376	1,144	490	254
Michigan.....			14,201	13,470	6,672	3,831			
Minnesota.....		5,775	11,397	7,555	1,213	1,447	692	406	130
Mississippi.....			2,761	4,014	3,332	2,475	1,798	2,230	
Missouri.....		4,043	5,359	1,696	466				
Montana.....	67	1,022	1,847	1,650	1,400	348	514	206	82
Nebraska.....	154	1,815	3,998	6,048	3,272	2,492	2,007	834	849
New Hampshire.....		382	460	701	383	488			
New Jersey.....	753	7,365	9,603	5,807	2,798	1,043	764	365	171
New Mexico.....	61	260	1,576	1,166	652	204	186	97	90
New York (exclusive of New York City).....	555	4,755	11,616	13,259	11,304	5,330	4,030	2,434	1,081
New York City.....	5,690	30,436	21,388	8,091	3,030	1,069	489	381	230
North Carolina.....		3,356	12,892	25,571	18,439	8,398	3,800	1,605	
North Dakota.....			945	497	178				
Ohio.....			10,479						
Oregon.....			1,042	1,318	1,971				
Pennsylvania.....			16,090	13,324	9,365	2,723	3,309		
South Carolina.....		1,661	3,479	3,916	2,849	1,716	971	678	523
South Dakota.....	118		5,042	4,976	3,047	1,649	495	120	267
Tennessee.....			2,331	1,432					
Texas.....			11,265	6,788	1,035	588	134	55	
Utah.....			1,489	228	93				
Vermont.....	25	89	272	796	1,314	1,071	481	470	158
Virginia.....		3,097	6,318	2,934	1,542	1,073			
Washington.....	12	902	6,451	6,426	4,593	1,559	1,260	271	93
West Virginia.....		1,667	4,732	6,308	1,848	780			
Wisconsin.....	1,944	6,739	14,328	10,310	6,274	3,131	994	554	603
Wyoming.....		1,372							
Total.....	34,000	142,136	295,433	265,981	158,294	90,752	48,219	29,779	13,975
Number of States reporting..	25	32	43	41	40	37	32	31	27

<sup>1</sup> Week ended Friday.

<sup>2</sup> Five days only.

<sup>3</sup> Six days only.

## OCCUPATION IN RELATION TO TUBERCULOSIS.

By GEORGE M. KOBER, M. D., LL. D., Professor of Hygiene, Georgetown University, Washington, D. C.

Health is the chief asset of the workingman, and no greater calamity can befall him than to have his earning capacity impaired or arrested by reason of sickness or disability; it means in many instances the utter financial ruin of the family, and is doubtless one of the most potent causes of poverty and distress.

In the search for the causes and prevention of diseases, the interests of the wage earners have not been neglected; indeed it may be truly said that a special department has been created known as Industrial Medicine and Hygiene, with a very creditable, but by no means complete, literature of its own.

The necessity for devoting special attention to this subject was shown long ago by observations made by Hippocrates and Galen, that certain occupations and trades, even in those primitive periods, were dangerous to health. These and subsequent authors refer in their writings to occupational diseases of miners, bearers of burdens, messengers, sailors, soldiers, chemists, and professional men. The first systematic treatise on diseases of occupation was written by Prof. Bernardo Ramazzini, of Padua. His monograph, *De Morbis Artificum Diatriba*, published in 1700, was translated into English in 1705, and into French in 1711, and awakened a deep interest in England and France and also in Germany.

Diseases of occupation are everywhere assuming more and more importance, not only to wage earners and employers, but also to physicians, who, in order to make an early diagnosis and give the patient the full benefit of treatment, should know the conditions injurious to health under which our fellow men and women live and work. In countries and States where reports of certain occupational diseases are compulsory, it is quite possible to secure fairly reliable data as to the number of cases of specific industrial poisoning.

The same may be said of the facilities afforded by the statistics of the German industrial insurance institutes, which furnish not only the number of deaths but also the number of cases treated, together with the age period and the duration of the disease. Similar facts, together with the results of highly specialized investigations, are now being collected and published in gratifyingly increasing numbers by Federal and State Governments.<sup>1</sup>

Such special investigations are all the more important when it is remembered that even the most complete statistics fail to reveal all the factors which influence the health and longevity of operatives. Great differences are found in the conditions under which the work is performed, some of which are entirely avoidable, while others are not, and it is hardly fair to characterize certain trades as dangerous when experience has shown that no harm results when proper safeguards have been taken. In the consideration of this question, the personal element of the workmen, their habits, mode of life, etc., can not be ignored. Many persons are engaged in occupations for which they are not physically fitted, and others ruin their health

<sup>1</sup> It is interesting to note that the first investigation by the Federal Government was made in Philadelphia in 1902 at the request of Hon. Carroll D. Wright, by my former student, Dr. C. F. W. Doehring. The result of his investigation in the manufacture of white lead, linoleum, fertilizers, etc., were published in 1903 in Bulletin 44, under the title of "Factory sanitation and labor protection."

by vice, dissipation, improper food, and insanitary home environments. There are also a number of occupations in which the alcohol habit prevails to an unusual extent, perhaps because of the character of the work, perhaps as the result of association, and so it would not be fair to attribute the ill health of the operatives altogether to the character of the employment. In addition to all this, there are factors, such as malaria, water and soil pollution, and especially hookworm infection, for which neither the industry, employer, nor employee is primarily to blame.

All this emphasizes the need of a thorough study of existing conditions, in order not only to determine the relative health risks, but also to formulate rules which may remove the causes or render the system better fitted to resist them. It is largely a public-health problem, and in this, as in all preventive efforts, a hearty cooperation is absolutely essential. In this instance the responsibility rests with the State, the employer, the employee, and the physician; each has certain duties to perform, and the help of all is necessary for the removal or mitigation of existing ills.

As a result of numerous independent investigations it is known today that persons habitually engaged in hard work, especially in factories and indoors, present a greater amount of sickness and a higher mortality than persons more favorably situated, and that the character of the occupation influences to a great extent not only the average expectation of life but also the prevalence of certain diseases.

#### **Etiology of Tuberculosis.**

From our knowledge of the etiology of tuberculosis, we know that while the tubercle bacilli are not ubiquitous, they are at least widely scattered and the modes of invasion are numerous, and yet there is a large proportion of those persons exposed to infection who do not develop the disease. This shows that in addition to the germ there must also be a suitable soil for the development of pathogenic effects. Such a soil is usually found in persons of feeble physique, victims of malnutrition, whose bodies have been weakened from any one or more of the numerous causes which are afloat,—a previous attack of sickness, hurry, worry, chronic fatigue, loss of sleep, vice, and dissipation, insufficient and improper food, insanitary homes, lack of pure air, etc.

Clinical experience indicates that faulty nutrition,<sup>1</sup> debility, loss of blood, anemia, mental anxiety, diabetes, whooping cough, measles, alcoholism, and many other diseases favor the development of tuberculosis.

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<sup>1</sup> The influence of an inadequate food supply is shown by the fact that the mortality rate from tuberculosis in Germany is as high now as it was in the early eighties, all the gains having been wiped out because of lack of sufficient food, and the consequent diminished resisting power of the system.

We also know that a predisposition may be inherited, as evidenced by a delicate physique, narrow chest, and general vulnerability of the tissues.

A vulnerability of the tissues may also be acquired by indoor life and dusty occupations, especially when the work involves exposure to dampness, extremes of heat and cold, sudden changes in temperature, and last but not least, exposure to industrial poisons.

#### **Danger of Indoor Life and Occupations.**

I am not disposed to overrate the dangers of indoor life and occupations. Indeed there may be no danger at all so far as the air is concerned, if steps have been taken for the removal of impure and the introduction of pure air. If, however, these precautions are neglected, there is every reason to assume that the habitual inhalation of air vitiated by dust, the products of respiration, combustion, and decomposition, and by the possible presence of toxic fumes and gases, plays an important rôle in the causation of respiratory diseases. All the injurious effects are intensified when human beings are obliged to occupy rooms with an air supply insufficient for the proper oxygenation of the blood, and also when, because of inadequate floor space, contact infections are more frequent. As a result of these adverse conditions we note an undue prevalence of consumption, pneumonia, and septic sore throat in crowded workshops, dwellings, prisons, and, formerly, also in military barracks and on battleships. The influence of overcrowding on disease of the air passages, amounting at times to epidemics, was well illustrated on the Isthmus of Panama and, as suggested by Gen. Gorgas, accounts probably for the undue prevalence of the diseases among the gold miners of the Transvaal. By moving the laborers on the Isthmus from large crowded barracks into single huts and rooms with not less than 50 square feet of floor space, the pneumonia rate was reduced in one year from 18.4 to 2 per 1,000.

Other bad effects in many indoor occupations result because the work is often performed by the worker while in a stooped position. The effects of such conditions of work are especially harmful to youthful workers whose osseous system is not fully developed. Among the more important harmful results should be mentioned the hollow chest and round, stooped shoulders, as seen in tailors, engravers, lithographers, jewelers, watchmakers, metal grinders, shoemakers, and all others obliged to assume a more or less bent-over position.

All thoracic postural deformities naturally interfere with free expansion of the lungs and, hence, with the respiratory functions, and also cause constipation, congestion of the portal circulation, and hemorrhoids. Many of the deformities, it is true, have been acquired

in the school, but they should be remedied in the workshop by adjustable seats, prompt correction of faulty positions, and well-regulated gymnastic exercises, especially of opposing groups of muscles.

The latest occupational mortality statistics for the United States for 1909 show that the mortality from tuberculosis in agricultural pursuits was 8.7 per cent; among bookkeepers and accountants, 22.5 per cent; and in servants and waiters, 27.4 per cent. If we stop right here the evidence would be overwhelming in favor of outdoor employment. But when we find that the tuberculosis mortality in Government officials and bankers is less than 8.7 per cent, and that for draymen, hackmen, and teamsters it is 23.4 per cent, it becomes apparent that in estimating the hazards of indoor occupations, other factors, such as physique, habits, exposure to dust, social conditions, and standards of living, must be considered.

#### Dusty Occupations.

Hoffman<sup>1</sup> estimates that of the 44,130,000 American wage earners of both sexes, approximately 4,000,000 work under conditions more or less detrimental to health, on account of the presence of an excess of atmospheric impurities predisposing to or accelerating the relative frequency of tuberculous and nontuberculous respiratory diseases, and he submits the following table:<sup>2</sup>

Trade group.	Males.		Females.	
	Number.	Per cent.	Number.	Per cent.
Metallic dust.....	258,454	7.6	33,255	4.9
Mineral dust.....	514,693	15.8	15,532	2.3
Mineral industries.....	844,897	25.9	550	.1
Vegetable fiber dust.....	356,323	10.3	296,135	44.0
Animal and mixed fiber dust.....	183,937	5.6	149,262	22.2
Organic dust.....	531,911	16.3	177,545	26.4
Mixed organic and inorganic (public) dusts.....	594,285	18.2	1,399	.2
Total.....	3,264,500	100.0	673,478	100.0

The dust which we inhale is, fortunately, largely arrested in the upper air passages, especially in the nostrils, and in case of mouth breathers also in the buccal cavity. In an ordinary way the dust arrested in the nose, unless ejected by sneezing, mixes with the mucus, and after reaching the throat, also with the saliva, and is unconsciously swallowed. Only a small amount of the dust actually reaches the lungs. Saito,<sup>3</sup> working in Lehmanns's Laboratory, located from 4 to 24 per cent of the total amount of white-lead dust in the respiratory organs, and the remainder in the digestive tract.

<sup>1</sup> Hoffman, Frederick L., Mortality from Respiratory Diseases in Dusty Trades: U. S. Department of Labor, Bureau of Labor Statistics, No. 231, June, 1918. On pages 46-50, the lists of occupations representing the various dusty-trade groups are given, and offer material for serious reflection.

<sup>2</sup> Compiled from the report of the Bureau of the Census on occupational statistics, 1910.

<sup>3</sup> Saito Yoichiro Dr., Experimentelle Untersuchungen über die quantitative Absorption von Staub: Arch. f. Hyg., München u. Leipz. Bd. LXXV.

Nature has provided numerous safeguards to prevent the lodgment of dust in the lungs (such as sneezing, coughing) and in the ciliated epithelial cells of the trachea; but when as a result of long-continued exposure this protective influence is diminished or ceases, dust will reach the air vesicles and produce mischief.

In Laborde's experiments with guinea pigs exposed to the inhalation of fine white-lead dust, the animals died within two hours. In the lungs were found intense congestion and ecchymoses. When the exposure was less intense and the animals lived longer, similar but less profound vascular changes were found in the lungs, pointing to direct irritation from the dust. Under ordinary circumstances and with limited quantities of soluble dust, the epithelial motile cells endeavor to protect the lungs once more by taking up the fine dust particles and transporting them through the lymphatics into the bronchial glands. When, however, the amount of dust is beyond their capacity, or its character is of a certain nature, it acts as a foreign body, causing an irritation, which is followed by a catarrh and the more serious chronic reactive inflammations of the respiratory organs so common among persons engaged in dusty occupations. The chronic inflammatory conditions thus produced are generally known as "pulmonary fibrosis."

The degree of injury to the respiratory organs depends upon the character of the individual particles of dust and their chemical composition. It is generally admitted that the sharp, angular, and nonabsorbable particles of metallic and also of mineral dust, especially dust containing silica, are much more apt to produce an intensive irritation, and even actual abrasions, than organic dust; hence it is reasonable to assume that they may thus favor invasion of bacilli or lighting up inactive lesions.

It is also doubtless true, as pointed out by Collis,<sup>1</sup> that dusts are more injurious if they differ in their chemical composition from the elements of which the body is normally composed. This may account for the fact that lime dust, in spite of its angular form, and plaster of Paris, with its more or less acute angles, and also cement dust, are comparatively innocuous.

Nieszytka<sup>2</sup> reports that while 76.5 per cent of all the deaths among the sandstone workers in Hanover are caused by tuberculosis, according to Grab's statistics, tuberculosis in limestone workers is the cause of death in only 7.5 per cent of the total mortality.

Koelsch<sup>3</sup> confirms Grab's statistics with reference to the lime and cement industry, and adduces evidence to show that among 400 workers in a German plaster of Paris establishment, no cases of tuberculosis occurred during a period of 17 years, and that of 40,824 deaths

<sup>1</sup>Collis, International Med. Congress, London, 1913.

<sup>2</sup>Nieszytka: *Vrtljschr. f. gerichtl. Med.*, Berl. 1912. XLIII supp. Heft 1, 2, p. 143.

<sup>3</sup>Koelsch: *Krankheit u. Sociale Lage*. Erst. Leipz. u. München.

from tuberculosis, analyzed by Fisac, in Spain, only 17, or 0.41 per cent, occurred in lime or gypsum workers. Selkirk,<sup>1</sup> of our own country, was also unable to find a single case of phthisis among lime workers, nor could he learn of any worker in lime kilns having died from this disease.

It is generally admitted that only the finest particles of dust, regardless of its source, gain access to the lungs, and that the volume of dust and intensity and duration of exposure play an important rôle in the degree of injury inflicted.

*Municipal dust.*—I have analyzed the original tabulation by the Prudential Insurance Co. of America based upon its industrial experience from 1907 to 1912, and find that 10,567 deaths occurred in individuals exposed to municipal dust. This group includes street cleaners, drivers, draymen, teamsters, coachmen, street-car conductors and street-car motormen. The proportionate mortality from consumption is 23.8 per cent, and from other respiratory diseases, 11.8 per cent, at ages of 15 or over. But when we find that the mortality from consumption in the street cleaners is only 12.9 per cent compared with 25 per cent in street-car conductors and motormen, and 33 per cent in coachmen, we are forced to the conclusion that other factors besides the element of dust have to be considered.

*General organic dust.*—In the same study we find that 5,694 deaths occurred in workers exposed to general organic dust. This group includes bakers, candy makers, flour millers, glove makers, harness makers, belt and pocketbook makers, shoe-factory workers, tannery finishers, button makers, cigar makers, tobacco workers, comb makers, and grain handlers. The proportionate mortality from pulmonary tuberculosis is 24.9 per cent and from other respiratory diseases 11.3 per cent. Here again we have reason to inquire how to account for the difference between 23.3 per cent in bakers and 37.2 in tannery finishers, or 36.1 per cent in cigar makers.

*Vegetable fiber dust.*—Another study deals with 1,120 deceased workers at ages of 15 and over, who were exposed to the inhalation of vegetable fiber dust. This group includes furniture finishers and sanders, woodwork finishers, cotton spinners, knitting-mill employees, lace, linen, flax, and other weavers, paper cutters and rope makers. The proportionate mortality from pulmonary tuberculosis is 29.1 per cent and from other respiratory diseases 11.1 per cent. Here again we observe great differences in the percentage of 22.1 from consumption in knitting-mill employees, against 49.2 per cent in lace weavers.

*Animal and mixed fiber dust.*—Study No. 4 deals with 1,276 deceased workers who were exposed to animal and mixed fiber dust. The occupations included in this group are hatters, upholsterers,

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<sup>1</sup> Selkirk: J. Am. M. Assn., December 12, 1908.

carpet weavers and workers, silk weavers, woolen-mill employees, fur workers and mattress workers. The proportionate mortality from pulmonary tuberculosis is 29.1 per cent and from other respiratory diseases 11.1 per cent, exactly the same as for vegetable-fiber dust.

*Mineral dust.*—Study No. 5 refers to 3,734 deceased workers who were exposed to mineral dust. The occupations included are potters, tile makers, glass blowers and cutters, marble and stone cleaners, cutters and polishers, core makers, molders, lapidaries, lithographers, paper hangers, and plasterers.

The proportionate mortality from pulmonary tuberculosis is 25.9 per cent and from other respiratory diseases 14 per cent. It is important to note that the percentage of deaths from pulmonary tuberculosis, contrary to expectations, is 3.2 per cent less than in the two preceding groups, which were exposed to vegetable dust, and animal and mixed fiber dust, although the percentage of deaths from other respiratory diseases is 3 per cent greater than in all other groups.

*Metallic dust.*—Study No. 6 refers to 3,374 deceased workers, who were exposed to metallic dust. The occupations included are grinders, polishers, cutlery, file and tool workers, brass molders and finishers, gold beaters, jewelers, gold and silver polishers, type founders, engravers, printers, and pressmen. The proportionate mortality from pulmonary tuberculosis in this group is 30.3 per cent and from other respiratory diseases 11.1 per cent.

*Recapitulation.*

Dust exposed to.	Number of workers.	Proportionate mortality from—	
		Pulmonary tuberculosis.	Other respiratory diseases.
		<i>Per cent.</i>	<i>Per cent.</i>
Metallic dust.....	3,374	30.3	11.1
Animal and mixed fiber dust.....	1,276	29.1	11.1
Vegetable fiber dust.....	1,120	29.1	11.1
Mineral dust.....	3,734	25.9	14.0
General organic dust.....	5,694	24.9	11.3
Municipal dust.....	10,567	23.8	11.8

The foregoing data undoubtedly point to the fact that exposure to all kinds of dust plays a very important rôle in the causation of respiratory diseases. Dust containing crystalline silica, such as quartz, quartzite (ganister, buhr-stone), flint, sandstone, carborundum, and emery is perhaps the most frequent cause of the more acute forms of fibrosis. It is possible that even in what is commonly called metallic dust the siliceous particles from grinding and polishing implements, are, with the possible exception of the red oxide of iron, chiefly

responsible for the cases of siderosis. All other kinds of dust, however, may, and doubtless frequently do, produce a milder grade of pneumoconiosis and fibrosis.

Whether or not the lesions thus produced may eventuate in pulmonary tuberculosis depends probably upon a number of factors, the most important of which is the presence of tubercle bacilli. Watkins-Pitchford cited by Landis<sup>1</sup> found tubercle bacilli in 15.2 per cent of samples of sputa collected underground in the Transvaal gold mines, as against 2.5 per cent of sputa collected in the homes and places of resort of the workers. Similar investigations in other industries may bring us nearer the truth; but after all, the danger from droplet infection, the common drinking cup, including the whisky flask, which formerly in the spirit of good fellowship was not infrequently passed from mouth to mouth, and the question of massive infection can not be underrated.

In the light of our knowledge concerning infection in early childhood, it is perfectly conceivable that the germs of tuberculosis may remain dormant because of the formation of fibroid tissue, and that the same factors which determine the development of an acute or chronic form of tuberculosis and the reactivation in apparently arrested cases of pulmonary tuberculosis have to be considered. Many of the general predisposing causes calculated to diminish the general power of resistance and thus create a suitable soil for the development of the disease have already been alluded to. Personally, I am convinced that exposure to dust alone does not account for the undue prevalence of tuberculosis in certain occupations, and that every factor which undermines the general health of the individual is at least of equal if not greater importance in determining the course of the disease. I have therefore arranged in the following tables the percentage distribution of pulmonary tuberculosis in certain occupations in an ascending scale and not according to exposure to the different varieties of dust. I will make such comments as I am able to offer as to the possible influence of physique, standards of living, and the effects of alcohol, lead, mercury, and other industrial poisons.

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<sup>1</sup> Landis, H. R. M., *Jour. of Ind. Hyg.*, July, 1919, p. 125.

TABLE I.—Occupational mortality statistics; per cent distribution, with special reference to tuberculosis.

Occupations.	Number of deaths.	Tuber- culosis.	Pneu- monia.	Other res- piratory diseases.	Heart diseases.	Diseases of digestive system.
All occupations:		<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Male.....	210,507	14.8	8.0	2.2	11.9	2.8
Female.....	27,459	21.0	7.0	2.2	10.3	3.6
Lumbermen and raftsmen.....	815	5.6	6.3	.6	9.0	2.2
Coal miners <sup>1</sup> .....	1,557	5.8	10.4	1.1	9.6	.....
Bankers.....	712	5.9	10.8	1.0	12.1	2.5
Manufacturers and officials.....	2,805	6.3	7.2	2.0	13.2	3.5
Farmers, planters, and overseers.....	34,662	6.6	6.6	2.1	16.3	3.8
Physicians and surgeons.....	1,421	6.6	7.4	1.8	12.7	3.5
Clergymen.....	1,216	6.6	7.1	2.0	15.5	3.5
Steam-rail employees.....	5,555	7.0	4.3	1.1	5.3	1.3
Lawyers.....	1,325	7.5	7.9	1.9	12.7	3.1
Farmers, planters, and overseers <sup>2</sup> .....	799	7.9	6.9	1.1	14.8	4.0
Officials, Government.....	997	8.6	7.3	1.4	15.3	3.0
Agricultural pursuits:						
Females.....	879	8.6	6.8	3.1	15.1	4.0
Males.....	50,844	8.7	7.1	2.2	15.1	3.5
Foremen and overseers.....	745	8.7	6.8	2.3	11.3	2.6
Watchmen, police, and firemen.....	2,355	8.7	7.9	2.1	14.6	2.1
Miners and quarrymen.....	5,663	8.8	8.2	4.3	7.1	2.0
Hotel keepers.....	765	9.3	6.8	1.7	11.2	4.2
Gardeners, florists, and nurserymen.....	1,215	9.3	9.1	3.6	14.7	3.6
Farmers and farm laborers <sup>1</sup> .....	3,890	9.7	6.2	.....	16.5	.....
Stock raisers, herders, and drovers.....	766	9.8	6.8	2.0	12.0	4.0
Merchants and dealers (except wholesale).....	9,329	9.9	7.0	1.9	13.1	3.3

<sup>1</sup> Metropolitan Life Insurance Experience, 1911-1913.<sup>2</sup> Prudential Industrial Insurance Experience.

Table I deals with 21 occupations. The percentage of deaths from tuberculosis ranges from 5.6 in lumbermen and raftsmen to 9.9 in merchants and dealers. The percentage of 5.8 in coal miners, based upon the experience of the Metropolitan Insurance Co. in 1,557 deaths, is quite low as compared with 9.7 per cent given by the Prudential Co. in 3,658 deaths, and 9.2 per cent as given by Hayhurst<sup>1</sup> based upon 5,428 deaths among Illinois soft-coal miners from 1912 to 1918.

Dr. Hayhurst in his excellent discussion of the subject invites attention to the fact that the marked excess in deaths due to violence in mining operation nullifies to a large extent any comparison possible between the other causes of deaths. When, in the case of miners, he omitted violence as a cause of death and then compared the purely medical causes (with suicide included), he found the percentage of deaths from tuberculosis to be 14.6.

Dr. William H. Davis, the chief statistician for vital statistics of the United States Bureau of Census, cautioned me at the outset of these studies that a proper interpretation of mortality percentage figures by age and occupation can only be made by constantly keeping in mind the normal death rates of the various occupations and ages. For example, a low percentage from tuberculosis may not

\* <sup>1</sup> Hayhurst, Emery R., *The Health Hazards and Mortality Statistics of Coal Mining in Illinois and Ohio*: Jour. of Ind. Hyg., November, 1919.

mean an actually lower rate from this disease, but may mean that there is an unusually high rate from accidents or some other cause. The violence percentage in steam-railway employees was 53.6, and in lumbermen and raftsmen 29.9; and this accounts for their remarkably low percentage of deaths from tuberculosis in this table, and also for the low percentage in miners and quarrymen.

This table shows, however, quite clearly that tuberculosis is infrequent in occupations involving out-door life combined with muscular activity; but it also shows that it is infrequent in the liberal professions, among bankers, officials, hotel keepers, and shop keepers, presumably because of higher standards of living.

TABLE II.—Occupational mortality statistics, per cent distribution.

Occupations.	Number of deaths.	Tuber- culosis.	Pneu- monia.	Other respira- tory diseases.	Heart diseases.	Diseases of digestive system.
		Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Commercial travelers.....	542	10.0	5.2	1.2	9.8	3.9
Carpenters and joiners.....	7,883	10.1	7.1	2.0	14.4	2.7
Puddlers <sup>1</sup> .....	251	10.4	6.2	.....	16.5	.....
Agents.....	2,625	10.4	7.7	1.0	13.0	2.8
Boatmen and sailors.....	1,757	10.4	7.4	1.7	10.0	1.6
Cabinetmakers.....	632	10.9	5.5	2.9	12.3	3.0
Nurses and midwives.....	915	11.1	7.8	1.6	11.4	3.6
Railway track and yard workers <sup>2</sup> .....	1,932	11.1	6.4	1.3	12.0	.....
Blacksmiths.....	2,456	11.4	8.0	2.5	13.8	3.1
Professional service, male.....	9,214	12.0	7.3	1.0	12.3	2.9
Housewives and housekeepers <sup>2</sup> .....	88,151	12.0	6.0	1.4	15.3	.....
Engineers and firemen, not locomotive.....	3,295	12.6	7.7	1.9	11.8	2.5
Boot and shoe makers and repairers.....	2,702	13.4	8.5	2.5	13.7	2.2
Coopers.....	570	13.7	8.9	4.4	12.6	2.3
Iron-ore miners.....	563	13.7	7.6	9.6	.....	.....
Janitors and sextons.....	1,065	13.9	12.6	1.8	13.0	2.5
Masons, brick and stone.....	2,399	13.9	8.2	2.5	13.2	2.3
Railway engineers and trainmen <sup>1</sup> .....	947	14.0	5.1	.....	5.4	.....
Agricultural laborers.....	13,214	14.5	8.4	2.2	12.6	2.8

<sup>1</sup> Prudential Industrial Insurance Experience.

<sup>2</sup> Metropolitan Life Insurance Experience, 1911-1913.

Table II deals with 19 occupations. The percentage of deaths from tuberculosis ranges from 10 in commercial travelers to 14.5 in agricultural laborers. The percentage in the latter group appears high when compared with 8.7 per cent in 50,844 persons engaged in other agricultural pursuits, unless accounted for by lower standards of living. It is rather remarkable that the percentage of tuberculosis in carpenters and cabinetmakers, exposed as they are to a mixture of vegetable and mineral dust in sandpapering, should be about the same as that in commercial travelers. We note, however, that the percentage of deaths from digestive diseases in the latter group is quite high, possibly indicating a lower state of nutrition. The percentages in all the other occupations enumerated in this table are below 14.8, which is the average for all occupations, in spite of the fact that a number of them are dusty trades.

TABLE III.—Occupational mortality statistics, per cent distribution.

Occupations.	Number of deaths.	Tuber- culosis.	Pneu- monia.	Other respira- tory diseases.	Heart diseases.	Diseases of digestive system.
		<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Teachers and professors (college, male)....	587	15.0	5.6	1.7	12.6	4.3
Saloon keepers.....	973	15.5	8.5	1.6	7.3	2.9
Manufacturers, mechanical pursuits.....	63,880	15.5	7.9	2.4	11.4	2.6
Salesmen.....	2,550	15.8	7.6	1.0	11.5	2.8
Butchers.....	1,503	16.2	8.3	1.2	12.0	2.8
Iron and steel workers.....	2,838	16.3	10.8	1.5	10.0	2.5
Trade and transport workers.....	44,941	16.6	7.3	1.6	10.2	2.5
Plasterers <sup>1</sup> .....	977	16.7				
Bakers.....	952	18.2	8.6	1.9	10.8	2.5
Hucksters and peddlers.....	799	18.3	9.5	2.1	10.8	2.4
Machinists.....	3,317	18.3	7.9	1.9	11.1	2.4
Domestic servants and laundresses (female).....	1,091	18.5	8.7	2.6	11.5	3.9
Domestics, personal service (female).....	17,735	18.7	7.5	2.3	10.6	3.7
Street-railway employees.....	697	18.9	6.2	1.3	6.3	1.4
Painters, glazers, and varnishers.....	3,720	18.9	8.0	1.7	10.6	2.4
Tin-plate and tinware workers.....	681	18.9	8.2	2.5	11.6	2.9
Tailors.....	2,408	19.0	7.7	3.5	10.5	3.0
Dressmakers.....	1,019	19.2	7.0	1.3	11.7	2.9
Servants and waitresses.....	14,930	19.5	7.3	2.3	10.4	3.7
Professional service (female).....	1,725	19.7	6.9	1.8	8.8	3.5
Domestic and personal service (male).....	41,624	19.7	10.2	2.2	10.4	2.5
Laborers, not specified.....	29,345	19.9	11.0	2.4	10.1	2.5

<sup>1</sup> Prudential Industrial Insurance Experience, 1911-1913.

Table III includes 22 occupations. The percentage of deaths from tuberculosis varies from 15 in college professors and teachers to 19.9 in day laborers. The percentage in female college professors and teachers is 21.5. Both are usually recruited from weak stock, and the high percentage of diseases of the digestive organs in both sexes is indicative of a low state of nutrition. The rates suggest the need of improvement in personal hygiene and the sanitation of classrooms. The percentage in saloon keepers is 15.5, as compared with 9.3 in hotel keepers, and 26 per cent in innkeepers and bartenders. The conclusion seems irresistible that chronic alcoholism plays an important rôle in the latter group. Butchers and steel workers have about the same percentage in tuberculosis, but the steel workers have a higher pneumonia rate. Butchers have a high venereal rate and are often alcoholic. In painters and tinware workers the element of chronic lead poisoning should be considered. The percentage of deaths from tuberculosis in tailors and dressmakers is almost the same. Exposure to a mixture of vegetable and animal dust and a postural influence may be discerned, since finishers (among males) show the greatest percentage of faulty postures. The rates for servants and laborers are above the average and are doubtless influenced by exposure to dust and also by alcohol.

TABLE IV.—Occupational mortality statistics, per cent distribution.

Occupations.	Number of deaths.	Tuber- culosis.	Pneu- monia.	Other respira- tory diseases.	Heart diseases.	Diseases of digestive system.
		<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Engravers <sup>1</sup> .....	112	20.5	2.7	0.9	.....	.....
Hostlers.....	540	20.6	13.9	.8	12.2	2.0
Cotton-mill operatives.....	686	21.1	6.9	2.0	11.5	3.5
Textile-mill workers <sup>2</sup> .....	2,390	22.0	5.9	.....	10.7	.....
Teachers and professors (college, female).....	1,170	21.5	8.0	1.6	8.4	3.5
Painters and paper hangers <sup>2</sup> .....	2,722	21.9	6.1	.....	10.7	.....
Iron molders.....	1,646	21.9	10.6	.....	13.1	.....
Bookkeepers and accountants.....	1,740	22.5	6.1	1.5	12.5	2.2
Musicians and teachers of music.....	509	23.4	6.8	1.9	11.0	2.5
Draymen, hackmen, and teamsters.....	5,791	23.4	9.2	1.7	9.6	2.2
Barbers and hairdressers.....	1,398	23.0	6.2	1.4	10.7	2.5
Electricians.....	776	24.1	6.8	1.0	5.4	1.3
Seamstresses.....	695	24.2	6.9	2.4	10.2	4.5
Tobacco and cigar operatives.....	982	24.3	6.1	1.7	10.1	2.3
Machinists <sup>2</sup> .....	3,132	25.0	7.1	.....	11.1	.....

<sup>1</sup> Prudential Industrial Insurance Experience.<sup>2</sup> Metropolitan Life Insurance Experience, 1911-1913.

Table IV includes 15 occupations with a percentage of deaths varying from 20.5 in engravers to 25 per cent in machinists. Steel engravers are exposed to mercury, electricians to lead and mercury, and painters and machinists (in certain processes) to lead. In the case of textile workers, bookkeepers, accountants, teachers, musicians, and tobacco workers it is fair to assume that the majority are recruited from feeble stock, as shown by very high rates before the completion of the twenty-fifth year. In some of these industries, notably in the textile mills and tobacco factories, special investigations should be made as to the character of dust and whether or not tubercle bacilli are found. Heucke<sup>1</sup> claims to have found 0.56 per cent of nicotine in the dust of different tobacco establishments.

Barbers and hairdressers are frequently exposed to droplet infection and also to inhalation of fine hair. The percentage of deaths from tuberculosis in hostlers is 20.6 and from pneumonia 13.9, as compared with 9.8 and 6.8 in stock raisers, herders, and drivers. Inasmuch as the pneumonia rate among cavalry troops is quite generally in excess of other arms of the service, it occurred to me during my Army experience that the inhalation of the peculiar character of dust given off during the grooming of horses might be a factor in this increased susceptibility. The high rates in draymen, hackmen, and teamsters are usually attributed to exposure to weather without opportunity for active exercise; they have, however, also a high rate for alcoholism. In Great Britain the percentage in private coachmen is much lower, probably because of better habits and living conditions. Iron molders have a high rate of alcoholism and are more or less exposed to dust and also to carbon monoxide.

<sup>1</sup> Cited by Stephani. Weyls Handb. der Arbeiterkrankheiten. Jena, 1908, pp. 634-635.

TABLE V.—Occupational mortality statistics, per cent distribution.

Occupations.	Number of deaths.	Tuber- culosis.	Pneu- monia.	Other respira- tory diseases.	Heart diseases.	Diseases of digestive system.
		Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Saloon keepers and bartenders <sup>1</sup> .....	2,190	26.0	8.7	.....	8.3	.....
Manufacturing and mechanical pursuits (female).....	4,582	27.4	6.1	1.3	10.3	2.9
Servants and waiters.....	3,017	27.6	8.0	1.8	10.3	2.4
Dressmakers and garment workers <sup>1</sup> .....	2,172	27.8	5.7	.....	12.6	.....
Bartenders.....	1,115	27.9	11.0	1.6	8.3	2.3
Teamsters, drivers, and chauffeurs <sup>1</sup> .....	6,471	28.2	8.5	.....	9.7	.....
Clerks and copyists.....	7,384	28.3	7.3	1.6	8.6	2.1
Porters and helpers in stores.....	1,253	28.3	11.7	2.3	10.8	2.3
Marble and stone cutters.....	822	28.6	7.9	4.2	10.0	1.0
Plumbers, gas and steam fitters.....	1,178	29.2	8.7	1.6	9.3	2.6
Printers, lithographers, and pressmen.....	1,490	29.2	7.5	1.6	9.0	2.2
Longshoremen and stevedores <sup>1</sup> .....	651	29.2	8.3	.....	12.6	.....

<sup>1</sup> Metropolitan Life Insurance Experience 1911-1913.<sup>2</sup> Prudential Industrial Insurance Experience 1909-1913. (Reduces in 1914-1918 to 23.5 per cent, 7 per cent and 2.3 per cent.)

Table V includes 12 occupations, and the percentage of deaths from tuberculosis varies from 26 in saloon keepers and bartenders to 29.2 in longshoremen and stevedores. In both of these widely differing occupations, as also in teamsters, drivers, and chauffeurs, the influence of alcohol is apparent. My impression is that chauffeurs, if placed in a separate class, would probably show a lower percentage, as they are usually men of good stock and habits. They are, however, frequently exposed to carbon-monoxide poisoning.

The high percentage of 27.6 in male servants and waiters, against a percentage of 19.5 in female servants and waitresses, may be accounted for by the percentage of alcoholism, which was 0.2 in females and 1.8 in male servants. Females on the other hand, have a much higher rate from tuberculosis than males in the manufacturing and mechanical pursuits, or those engaged as bookkeepers and accountants, clerks and copyists, and garment workers. The high percentage in porters and helpers in stores may, in part, be accounted for by exposure to a mixed variety of dust, and possibly infected dust. Their rate for alcoholism is, however, far above the average. The high percentage in marble and stone cutters is doubtless influenced by exposure to mineral dust.

The percentage of tuberculosis in plumbers, gas and steam fitters, and in the printing industry are exactly the same. The influence of a subtle form of lead poisoning is apparent in both occupations, but appears to be more pronounced in plumbers. While it is true that many men of feeble stock enter the printing trades, the same can not be said of plumbers, gas and steam fitters. Alcoholism is charged with a percentage of 1.1 in printers, and 0.9 in plumbers.

TABLE VI.—Occupational mortality statistics, per cent distribution.

Occupations.	Number of deaths.	Tuber- culosis.	Pneu- monia.	Other respira- tory diseases.	Heart diseases.	Diseases of digestive system.
		<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Trade and transportation (female).....	2,538	30.9	5.4	1.5	7.7	3.7
Brass workers <sup>1</sup> .....	201	31.8	9.0	2.0	.....	.....
Clerks and copyists (females).....	844	31.9	6.2	1.2	6.4	3.6
Metal polishers and buffers <sup>1</sup> .....	242	31.9	12.9	.....	12.9	.....
Textile workers (female) <sup>2</sup> .....	1,742	35.5	4.1	.....	8.8	.....
Store clerks and saleswomen <sup>2</sup> .....	794	38.7	3.9	.....	7.7	.....
Clerks, bookkeepers, and office assistants (female) <sup>2</sup> .....	1,235	42.4	3.6	.....	8.1	.....

<sup>1</sup> Prudential Industrial Insurance Experience.<sup>2</sup> Metropolitan Life Insurance Experience, 1911-1913.

Table VI includes 7 occupations; and the percentage of deaths from tuberculosis varies from 30.9 in females engaged in trade and transportation (as compared with 16.6 in males) to 42.4 in female clerks, bookkeepers, and office assistants (as compared with 22.5 in men). Lead and mixed mineral and metallic dust doubtless play a rôle in the mortality in brass workers, metal polishers and buffers. The percentage from tuberculosis in female textile workers is 35.5 against 21.1 in males. The percentage in clerks and saleswomen is 38.7 (as compared with 15.8 per cent in salesmen). The questions of physique, race, and nationality, and many other factors doubtless influence these differences.

TABLE VII.—Percentage of deaths from tuberculosis in certain occupations, based upon the industrial experience of the Prudential Insurance Co. of America, 1907-1912.

Occupations.	Total deaths.	Tuber- culosis.	Occupations.	Total deaths.	Tuber- culosis.
		<i>Per cent.</i>			<i>Per cent.</i>
Furnace tenders in steel works.....	62	6.5	Weavers.....	597	34.7
Coal miners.....	3,658	9.7	Cigar makers.....	.....	36.1
Street cleaners.....	197	12.9	Glass blowers.....	197	36.3
Brick and tile makers.....	133	12.0	Printers.....	1,733	37.3
Slaters.....	93	13.7	Hatters.....	529	36.6
Quarry workers.....	149	14.8	Glass cutters.....	220	36.4
Blacksmiths <sup>1</sup> .....	1,273	14.8	Tanners.....	192	37.2
Heaters in steel plants.....	5	15.7	Polishers and grinders (iron and steel).....	136	37.5
Rollers.....	112	17.9	Stonecutters.....	616	37.6
Miscellaneous employment in steel plants.....	68	20.6	Copper miners.....	611	37.9
Cement-lime workers.....	222	20.7	Lithographers.....	325	38.3
Knitting-mill employees.....	103	22.1	Granite-stone cutters.....	204	39.2
Laborers in iron-steel plants.....	2,788	22.5	Jewelers.....	361	42.3
Iron-steel workers.....	1,341	22.6	Spinners.....	144	42.5
Street car employees.....	1,088	25.7	Polishers and grinders (iron and steel).....	138	42.9
Stove mounters and grinders.....	.....	27.9	Sheffield metal grinders.....	2,640	43.0
Draymen and teamsters.....	9,799	29.4	Brass workers.....	95	43.7
Core makers.....	357	29.4	Silk weavers.....	137	44.5
Artificial-flower makers (male).....	13	30.8	Polishers and finishers in brass.....	143	45.2
Glass workers.....	336	30.9	Tile makers.....	62	45.3
Gold-leaf beaters.....	53	32.0	Lead and zinc ore miners.....	96	49.0
Pressmen.....	224	32.6	Lace workers.....	31	49.2
Carpet weavers.....	101	32.7	Slate-pencils workers <sup>2</sup> .....	260	64.2
Coachmen.....	337	33.1	Flint knappers and buhrstone dressers <sup>2</sup> .....	.....	77.8
Upholsterers.....	400	33.6			
Painters.....	1,056	34.1			
Shoe-factory employees.....	.....	34.5			
Potters.....	267	34.6			

<sup>1</sup> Metropolitan Life Ins. Co.<sup>2</sup> German and English (Hoffman).

Table VII covers 52 industries or occupations, which, because not specifically enumerated in the foregoing tables or because of differences in percentage, are here presented. With few exceptions the data are based upon the experience of the Prudential Insurance Co. or collected by Dr. F. L. Hoffman.<sup>1</sup>

Many of these occupations have already been commented upon. The low figures for furnace tenders in steel plants may be due to a more rapid labor turnover. Puddlers are recruited from a very sturdy stock. Coremakers are exposed not only to dust, but also to carbon monoxide from open wood or coke fires or red-hot cast-iron stoves. Artificial flower makers were formerly exposed to lead and arsenite of copper; aniline colors have replaced to a great extent the latter coloring agent. Gold-leaf workers have also, in Europe, a very high mortality rate from respiratory diseases. It is possible that the copper and zinc contained in the alloy may exert a toxic effect. Carpet weavers, upholsterers, weavers, hatters, tanners, spinners, silk weavers and lace workers show a mortality percentage which is double and, in some instances, more than treble, the average for all occupations. The rate for tanners is unusually high, as the occupation calls for strength and endurance. The handling of the dry hides involves inhalation of more or less dust of an animal and inorganic origin, and fragments of hair. In certain of the tanning and dressing processes there is exposure to disulphide of arsenic, chromates, lead, benzene, and amyl acetate. The rate for hatters is also very high, and can not be wholly attributed to the volume or the character of the dust; indeed some of the processes are carried on in a dust-free atmosphere. It has been held for some time that the chief danger in this industry is exposure to the inhalation of nitrate of mercury which is employed in the carotting process, and which, in the opinion of Dr. Legge,<sup>2</sup> forms an insoluble compound with the keratine in the hair and is not removed in the subsequent process of the felt-hat industry. The men who make the solution and those who apply it are exposed not only to mercurial, but also to nitrous fumes, and all others engaged in certain dusty processes are exposed to the inhalation of dust impregnated with particles of nitrate of mercury. The stovers, who handle the hard felt shapers at a temperature of 180° F. in the drying department are exposed not only to mercurial vapors, but also in some establishments to the fumes of wood alcohol, employed in the shellacking process to stiffen the hats, which doubtless exerts a toxic effect on the system. There is also danger in some establishments from arsenical poisoning, since, according to Heinzerling and Lewin,<sup>3</sup> the fleshy part of hare and rabbit skins is not infrequently treated with a soap containing arsenite of potassium or sodium.

<sup>1</sup> Hoffman, Frederick L., *Mortality from Respiratory Diseases in Dusty Trades*: Bull. U. S. Bureau of Labor Statistics, No. 231. June, 1918.

<sup>2</sup> Legge, Thomas M. *Oliver's Dangerous Trades*.

<sup>3</sup> Cited by Schütte. *Weyl's Handb. der Arbeiterkrankheiten*, Jena, 1908, p. 386.

The excessive rates in glass workers, potters, file makers, and brass workers are likewise influenced not only by the character of the dust, but by exposure to lead. The rates for copper miners, and lead and zinc ore miners are also very high. This may be due to the high percentage of crystalline silica content in the dust of some of the mining districts; but since the percentage of deaths is very much lower in gold quartz miners, we strongly suspect that lead and copper may exert a toxic effect on the system in this class of miners.

The percentage for slate-pencil workers is exceedingly high. They are quoted by Hoffman from Sommerfeld and apply to a class of workers whose physical and social economic conditions are notoriously low; one-third of the workers were children below the age of 14. The mortality from tuberculosis is also high for slate workers in Wales. A British commission found that pure slate dust was rarely met with, but as a rule the dust included a considerable proportion of minute particles of adherent quartz.

The percentage of tuberculosis in lace workers is very high; in Great Britain it is somewhat below the average. It is quite possible that the dust inhaled during the making of linen lace is more injurious, because Greenhow, as early as 1865, has shown that flax dust contains silica. Excessive heat and humidity are injurious factors in some of the departments, and according to Arlidge, exposure to coal gas from gas-heated stoves in the process of "gauffering" is not infrequent. There is likewise danger from lead poisoning in workers in lace and silk weighted with lead acetate.

TABLE VIII.—Average age at death, by occupation.<sup>1</sup>

	MALE.	Average age at death.
Bookkeepers and office assistants.....		36.5
Enginemen and trainmen (railway).....		37.4
Plumbers, gas fitters, and steam fitters.....		39.8
Compositors and printers.....		40.2
Teamsters, drivers, and chauffeurs.....		42.2
Saloon keepers and bartenders.....		42.6
Machinists.....		43.9
Longshoremen and stevedores.....		47.0
Textile-mill workers.....		47.6
Iron molders.....		48.0
Painters, paper hangers, and varnishers.....		48.6
Cigar makers and tobacco workers.....		49.5
Bakers.....		50.6
Railway track and yard workers.....		50.7
Coal miners.....		51.3
Laborers.....		52.8
Masons and bricklayers.....		55.0
Blacksmiths.....		55.4
Farmers and farm laborers.....		58.5
All occupations.....		47.9

<sup>1</sup> Based upon the Experience of the Metropolitan Insurance Co. Industrial Department, 1911-1913, by Statistician Louis I. Dublin, Ph. D.

FEMALE.	Average age at death.
Clerks, bookkeepers, and office assistants.....	26.1
Store clerks and saleswomen.....	28.0
Textile-mill workers.....	33.9
Dressmakers and garment workers.....	42.0
Domestic servants.....	49.1
Housewives and housekeepers.....	53.3
All specified occupations.....	51.1

Fortunately, the effects of legislation and factory sanitation, together with the gospel of personal hygiene and higher standards of living conditions, which have been emphasized in the educational campaign against the great white plague, are strikingly shown by a most marked decrease in the mortality from tuberculosis in 8 of the so-called dangerous trades in the State of New Jersey.

Dr. F. S. Crum, assistant statistician of the Prudential Insurance Co., has kindly furnished me with data relating to occupations in the State of New Jersey. The table shows that the percentage of mortality from tuberculosis in hatters has been reduced from 29.7 in the period of 1909-1913 to 23.6 in the period of 1914-1918; the pneumonia rate during the same period has been reduced from 8.5 to 7, and other respiratory diseases from 4.9 to 2.3. In stone cutters the percentage of deaths from tuberculosis during the same period has been reduced from 26.3 to 19.7; in metal grinders, from 39.2 to 29.1; in molders, founders, and casters, from 19.7 to 17.4; in other iron and steel workers, from 24 to 17.2, and in plumbers, from 32.5 to 22.6. There was no decrease in the textile industry, the rate in the period 1909-1913 being 21.3, and in 1914-1918 21.7 per cent.

In potters there was an increase in the percentage of tuberculosis from 32.4 (1907-1913) to 36.6 during the period from 1914-1918. This increase, fortunately, does not indicate an increased hazard, for by reference to the tables it will be noted that there was a distinct decrease at ages between 10 and 39, showing that the protective measures are really effective in all newcomers, but that they could not avert the damage inflicted in the older workers before the adoption of the present safeguards.

TABLE IX.—*Proportionate mortality in specified industries from tuberculosis of the lungs, New Jersey, 1909-1918.*

## HATTERS.

Ages.	1909-1913			1914-1918			
	Deaths from—		Per-centage, (B) of (A).	Deaths from—		Per-centage, (B) of (A).	Per cent increase or decrease.
	All causes (A).	Tuber-culosis of the lungs (B).		All causes (A).	Tuber-culosis of the lungs (B).		
10-19.....	3	2	66.7	27	8	29.6	- 55.6
20-29.....	44	28	63.6	65	22	33.8	- 46.9
30-39.....	69	49	71.0	74	23	31.1	- 56.2
40-49.....	117	42	35.9	84	27	32.1	- 10.6
50-59.....	102	16	15.7	88	28	31.8	+102.5
60 and over.....	150	7	4.7	134	3	2.2	- 53.2
Total (ages 10 and over)...	485	144	29.7	472	111	23.5	- 20.9

## TEXTILE INDUSTRIES.

10-19.....	75	31	41.3	85	23	27.1	-34.4
20-29.....	183	84	45.9	226	76	33.6	- 26.8
30-39.....	159	48	30.2	245	89	36.3	+ 20.2
40-49.....	189	36	19.0	209	52	24.9	+31.1
50-59.....	161	20	12.4	223	34	15.2	+22.6
60 and over.....	298	8	2.7	550	12	3.6	+33.3
Total (ages 10 and over)...	1,065	227	21.3	1,518	286	21.7	+ 1.9

## METAL GRINDERS.

10-19.....	4			4			
20-29.....	23	14	60.9	39	14	35.9	-41.1
30-39.....	39	19	48.7	66	29	43.9	- 9.9
40-49.....	44	19	43.2	53	17	32.1	-25.7
50-59.....	21	5	23.8	55	13	23.6	- 0.8
60 and over.....	22	3	13.6	44	3	6.8	-50.0
Total (ages 10 and over)...	153	60	39.2	261	76	29.1	-25.8

## MOLDERS, FOUNDERS, AND CASTERS.

10-19.....	4	1	25.0	4			-100.0
20-29.....	42	16	38.1	45	14	31.1	- 18.4
30-39.....	57	21	36.8	83	18	21.7	- 41.0
40-49.....	65	11	16.9	101	21	20.8	+ 23.1
50-59.....	56	8	14.3	99	15	15.2	+ 5.3
60 and over.....	90	5	5.6	110	9	8.2	+ 46.4
Total (ages 10 and over)...	314	62	19.7	442	77	17.4	- 11.7

## STONECUTTERS.

10-19.....	2			4			
20-29.....	6	2	33.3	17	3	17.6	- 47.1
30-39.....	29	13	44.8	19	5	26.3	- 41.3
40-49.....	39	13	33.3	44	11	25.0	- 24.9
50-59.....	67	19	28.4	51	17	33.3	- 17.6
60 and over.....	67	3	4.5	93	9	9.7	+115.6
Total (ages 10 and over)...	190	50	26.3	228	45	19.7	- 25.1

TABLE IX.—*Proportionate mortality in specified industries from tuberculosis of the lungs, New Jersey, 1909-1918—Continued.*

## POTTERS.

Ages.	1909-1913			1914-1918			
	Deaths from—		Per-centage, (B) of (A).	Deaths from—		Per-centage, (B) of (A).	Per cent increase or decrease.
	All causes (A).	Tuber-culosis of the lungs (B).		All causes (A).	Tuber-culosis of the lungs (B).		
10-19.....	10	5	50.0	7	1	14.3	- 71.4
20-29.....	50	22	44.0	47	19	40.4	- 8.2
30-39.....	69	39	56.5	72	32	44.4	- 21.4
40-49.....	108	33	30.6	104	47	45.2	+ 47.7
50-59.....	71	20	28.2	105	31	29.5	+ 4.6
60 and over.....	75	5	6.7	72	19	26.4	+294.0
Total (ages 10 and over)...	383	124	32.4	407	149	36.6	+ 13.0

## IRON AND STEEL WORKERS.

10-19.....	35	7	20.0	20	3	15.0	-25.0
20-29.....	148	65	43.9	210	51	24.3	-44.6
30-39.....	264	102	38.6	299	69	23.1	-40.2
40-49.....	242	67	27.7	268	63	23.5	-15.2
50-59.....	220	29	13.2	234	26	11.1	-15.9
60 and over.....	264	11	4.2	287	15	5.2	+23.8
Total (ages 10 and over)...	1,173	281	24.0	1,318	227	17.2	-28.8

## PLUMBERS.

10-19.....	14	1	7.1	28	4	14.3	+101.4
20-29.....	99	51	51.5	162	36	22.2	- 56.9
30-39.....	135	55	40.7	195	84	27.7	- 31.9
40-49.....	118	35	29.7	178	48	27.0	- 9.1
50-59.....	59	11	18.6	123	36	29.3	+ 57.5
60 and over.....	70	8	11.4	115	3	2.6	- 77.2
Total (ages 10 and over)...	495	161	32.5	801	181	22.6	- 30.5

It is less than 15 years since attention has been paid to industrial hygiene in this country; but in view of what has been accomplished during that brief period, I venture to predict that no country will make greater progress in social and industrial betterment than our own beloved United States.

In the meantime no opportunity should be lost in the general campaign to emphasize the importance of personal hygiene and general sanitation; for be it remembered that every movement which makes for better health and a temperate, untainted, and virile race, will offer the best safeguard in the prevention of tuberculosis. When we supply our children with healthful school rooms and teach them the value of pure air, sanitary homes, proper and sufficient food, physical culture, baths and suitable clothing, and the importance of pure, clean lives, the lessons taught will be applied in the homes and workshops of the Nation.

## MUNICIPAL NARCOTIC DISPENSARIES.

By S. DANA HUBBARD, New York City Department of Health.

The Department of Health of the City of New York opened a dispensary for drug addicts on April 10, 1919, immediately following the arrest by internal revenue agents of certain physicians and druggists who had been supplying narcotic drugs. The reason for opening this "clinic," as it was called, was the fear of consequences that might result from the sudden shutting off of the source of supply of the many addicts who had been obtaining drugs from the arrested persons and from others in the same business who had suspended operations because of being frightened by these arrests.

Details of the operation of this "clinic," with classified statistics of the addicts attending it, have been published from time to time in the weekly bulletins of the department of health, and a full résumé of the 10 months' period of operation appeared in the department's monthly bulletin for February, 1920.

In the present article, space does not permit a recapitulation, but only such a statement of facts as is necessary to make clear the basis for the conclusions reached.

The officials of the department at the date of opening the "clinic" were not familiar with the facts of drug addiction, and haste was considered imperative, so the plan adopted was more or less arbitrary. Cocain, heroin, and morphin were dispensed on the day of opening in quantities not exceeding 15 grains. On the second day the dispensing of cocain was permanently discontinued, and heroin and morphin were thereafter the only drugs dispensed.

All applicants were examined by physicians of the department of health, and the drugs were dispensed only on prescriptions of these physicians. Duly licensed and registered pharmacists were in charge of the dispensing.

A policy of cutting down the daily supply at the rate of  $\frac{1}{2}$  grain every other day was early adopted, the reduction to continue until the minimum amount was reached which was considered necessary by the physicians to prevent undue suffering. This amount was found to be from 2 or 3 to 5 grains for the 24 hours.

The drugs were sold to the addicts at cost, no charge being made for the physicians' services.

As soon as possible a hospital was opened for withdrawal treatment, and those willing to go were sent to this hospital—the Riverside Hospital at North Brother Island—a special staff of physicians and nurses being selected for this undertaking. Here the addicts were kept for from 5 to 6 weeks at the expense of the city; the drug was withdrawn during the first 5 days, and hyoscin was administered for 3 days thereafter. Out of over 7,400 drug addicts attending the "clinic," less than 2,000 were willing to go to the hospital. A system

of registration was adopted, and cards were issued bearing the name, address, and other identifying particulars, together with a photograph of the addict and the official seal of the department of health. The addict was given a number, together with "dosage sheets," upon which was entered each day the amount and kind of drug received.

A study of the operation of the system outlined above has convinced the officials of the department that a dispensary in which narcotic drugs are given to addicts for self-administration is not the right way to deal with this problem, and by the time this article is printed, the New York "clinic" will have been permanently closed.

Among the facts observed were the following: Addicts often obtained more of the drug than they needed and sold the excess to other addicts or peddlers; addicts supplemented their supplies by purchase from peddlers; addicts got friends or relatives, who were not addicted, to register and attend the "clinic" in order to obtain additional supplies, and in some cases, it is stated, these friends became addicted in this way; prescriptions were forged or raised, dosage sheets were tampered with, false dosage sheets were manufactured and sold, registration cards were bought and sold, etc.

With but a very few possible exceptions, no cures are known to have been effected by means of the reduction system as used at this "clinic." So far as known, all the cases sent to the hospital were cured, in the sense that the drug withdrawal left no physical need or craving; but quite a number of these cases relapsed after discharge, some returning to the "clinic" under assumed names.

The conclusions reached from observation of the practical working of the dispensary system are that the ambulatory treatment, whether practiced by private physicians or by public authorities, is vicious in principle and in effect; that the institutional withdrawal of the drug is so simple, easy, prompt, and effective—and comparatively without any danger, there not having been a single fatality—that there is no need for prolonging addiction by a continued supply of narcotics; that the average addict will not voluntarily submit to institutional or other withdrawal treatment so long as he or she can obtain a supply of the drug, but will go to a hospital if unable to get more of the drug.

Some of the arguments that have been advanced in favor of dispensaries may be stated in the form of questions, and answered as follows:

*Does a dispensary help to get rid of peddlers?*

If a dispensary issues to all-comers all the drug they desire, it may, by competition, put the peddlers out of business. In that case there would not be much to choose between the evil and the alleged remedy. If it does not supply the drugs *ad libitum* it encourages the traffic of peddlers by keeping up the demand.

*Does a dispensary tend to prevent petty crime by addicts?*

The answer is much the same as that to the previous question. A jeweler could prevent burglars from breaking into his store by opening it to them and asking them to help themselves to his stock. The surest and quickest way to prevent crimes arising from an addict's craving for his drug is to cure the addict and thus remove the craving.

*Does a dispensary gradually decrease the number of addicts?*

It tends to increase the number; reasons are clearly shown in the text how this is effected.

*Is a dispensary necessary to prevent death or terrible suffering of addicts bereft of supply of drug?*

Death does not result from sudden deprivation of the drug in the case of a healthy addict—an addict without any therapeutic reason for addiction, as a case of cancer, painful tic, etc., naturally not being included in our consideration as all of these cases are under either suitable institutional or private physicians' care.

The suffering caused by the sudden deprivation is not as severe as it may appear on the surface, and it is of short duration.

If hospital facilities can be provided, there is no excuse for a public or private narcotic dispensary. If they can not, it might be desirable to make arrangements for *personal administration* of drugs to addicts as a temporary measure of relief. A dispensary where the drugs are dispensed to the addicts for self-administration is so harmful in its effects that it can not be recommended under any circumstances.

## DEATHS DURING WEEK ENDED MAR. 13, 1920.

[From the "Weekly Health Index," Mar. 16, 1920, issued by the Bureau of the Census, Department of Commerce.]

Deaths from all causes in certain large cities of the United States during the week ended Mar. 13, 1920, infant mortality (per cent), annual death rates, and comparison with corresponding week of preceding years.

City.	Population July 1, 1918, estimated.	Week ended Mar. 13, 1920.		Average annual death rate per 1,000. <sup>3</sup>	Per cent of deaths under 1 year.	
		Total deaths.	Death rate. <sup>1</sup>		Week ended Mar. 13, 1920.	Previous year or years. <sup>2</sup>
Albany, N. Y.	112,565	46	21.3	C	23.6	C 13.7
Atlanta, Ga.	201,732	73	18.9	C	15.5	C 15.0
Baltimore, Md.	366,981	277	21.6	A	22.5	A 12.9
Birmingham, Ala.	197,670	90	23.7	A	17.9	A 13.7
Boston, Mass.	785,245	250	16.6	A	18.9	A 14.3
Buffalo, N. Y.	473,229	174	19.2	C	14.8	C 14.2
Cambridge, Mass.	111,432	30	14.0	A	16.4	A 12.3
Chicago, Ill.	2,596,681	764	15.3	A	17.5	A 18.1
Cincinnati, Ohio	440,158	130	16.9	C	20.3	C 9.2
Cleveland, Ohio.	810,306	242	15.6	C	12.8	C 15.6
Columbus, Ohio.	225,296	79	18.3	C	15.3	C 16.7
Dayton, Ohio.	130,655	41	16.4	C	15.2	C 10.5
Denver, Colo.	67	67	16.4		16.4	
Detroit, Mich.	318	318	16.4		16.4	
Fall River, Mass.	124,392	39	15.8	C	17.9	C 18.2
Grand Rapids, Mich.	135,470	39	15.0	C	11.9	C 19.4
Indianapolis, Ind.	290,389	96	17.2	C	14.2	C 11.4
Jersey City, N. J.	318,770	105	17.2	C	19.6	C 18.3
Kansas City, Mo.	313,785	105	17.4	C	16.6	C 9.0
Los Angeles, Calif.	568,495	166	15.2	A	14.9	A 9.4
Louisville, Ky.	424,891	82	18.2	C	23.8	C 11.7
Lowell, Mass.	109,081	51	24.4	A	20.8	A 22.8
Memphis, Tenn.	72	72	23.2	C	13.9	C 11.6
Milwaukee, Wis.	453,481	94	10.8	A	15.0	A 25.2
Minneapolis, Minn.	383,442	96	13.1	C	11.0	C 18.8
Nashville, Tenn.	119,215	60	26.2	C	21.0	C 12.5
Newark, N. J.	428,684	102	12.4	C	15.7	C 16.3
New Haven, Conn.	174,865	64	21.5	C	21.2	C 27.0
New Orleans, La.	382,273	211	28.8	A	20.2	A 10.0
New York, N. Y.	5,215,879	1,676	16.8	C	19.4	C 14.2
Oakland, Calif.	214,206	70	17.0	A	12.3	A 9.4
Omaha, Neb.	180,264	48	13.9	C	9.3	C 15.6
Philadelphia, Pa.	1,761,371	673	19.9	(C)	19.4	(C) 13.4
Pittsburgh, Pa.	593,303	231	20.3	C	17.2	C 16.8
Portland, Oreg.	81	81	8.6		8.6	C 7.6
Providence, R. I.	263,613	74	14.6	C	15.8	C 20.0
Richmond, Va.	160,719	65	21.1	C	21.4	C 18.2
Rochester, N. Y.	264,856	89	17.5	C	14.8	C 20.0
St. Louis, Mo.	779,951	247	16.5	C	17.7	C 8.7
St. Paul, Minn.	257,699	50	10.1	C	10.7	C 9.4
San Francisco, Calif.	478,530	176	19.2	C	17.1	C 8.3
Seattle, Wash.	88	88	17.0		17.0	A 13.9
Syracuse, N. Y.	161,404	49	15.8	C	17.1	C 22.6
Toledo, Ohio.	4243,109	83	17.8	A	16.4	A 13.7
Washington, D. C.	4437,414	135	16.1	A	19.4	A 9.9
Worcester, Mass.	173,650	68	20.4	C	16.5	C 18.2

<sup>1</sup> Annual rates per 1,000 estimated population.<sup>2</sup> "A" indicates data for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates data for the corresponding week of the year 1917.<sup>3</sup> Population estimated as of July 1, 1919.<sup>4</sup> 1920 enumeration, subject to revision.<sup>5</sup> Data are based on statistics of 1915, 1916, and 1917.

Summary of information received by telegraph from industrial insurance companies for week ended Mar. 13, 1920.

Policies in force..... 41,997,632  
 Number of death claims..... 13,276  
 Death claims per 1,000 policies in force, annual rate..... 16.5

# PREVALENCE OF DISEASE.

*No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.*

## UNITED STATES.

### CURRENT STATE SUMMARIES.

#### Telegraphic Reports for Week Ended Mar. 20, 1920.

These reports are preliminary, and the figures are subject to change when later returns are received by the State health officers.

ALABAMA.		CONNECTICUT—continued.	
	Cases.		Cases.
Chicken pox.....	31	Influenza:	
Diphtheria.....	9	Fairfield County.....	16
Influenza.....	829	Hartford County.....	9
Malaria.....	8	Middlesex County.....	1
Measles.....	31	New Haven County.....	24
Mumps.....	9	New London County.....	1
Pneumonia (all forms).....	34	Windham County.....	2
Scarlet fever.....	10	Lethargic encephalitis.....	1
Smallpox.....	43	Measles:	
Tuberculosis (pulmonary).....	20	Fairfield County—	
Whooping cough.....	15	Danbury.....	7
		Stamford.....	8
ARKANSAS.		Hartford County—Hartford.....	10
Chicken pox.....	43	Litchfield County—	
Diphtheria.....	8	Norfolk.....	8
Influenza.....	835	Winchester.....	22
Malaria.....	12	New Haven County—	
Measles.....	13	Ansonia.....	7
Ophthalmia neonatorum.....	1	New Haven.....	46
Pellagra.....	2	Orange.....	16
Pneumonia.....	42	Waterbury.....	10
Scarlet fever.....	4	New London County—	
Smallpox.....	24	New London.....	65
Trachoma.....	3	Stonington.....	7
Tuberculosis.....	12	Scattering.....	45
Whooping cough.....	6	Mumps.....	11
		Pneumonia.....	25
CALIFORNIA.		Poliomyelitis—Orange.....	1
Cerebrospinal meningitis:		Scarlet fever:	
San Francisco.....	1	Hartford County—	
Influenza.....	582	Hartford.....	11
Lethargic encephalitis:		New Britain.....	9
San Francisco.....	1	New Haven County—Waterbury.....	30
Smallpox:		Scattering.....	49
Corona.....	8	Septic sore throat.....	1
Scattering.....	32	Tuberculosis.....	33
Typhoid fever.....	4	Typhoid fever.....	1
		Whooping cough.....	50
CONNECTICUT.			
Cerebrospinal meningitis:			
Hartford.....	1		
New London.....	1		
Chicken pox.....	40		
Diphtheria.....	53		
German measles.....	1		
		DELAWARE.	
		Chicken pox.....	3
		Diphtheria.....	7
		Influenza.....	13
		Measles.....	121
		Mumps.....	1

## DELAWARE—continued.

	Cases.
Pneumonia.....	9
Scarlet fever.....	5
Tuberculosis.....	5
Whooping cough.....	2

## FLORIDA.

Cerebrospinal meningitis.....	3
Diphtheria.....	5
Dysentery.....	2
Influenza.....	298
Malaria.....	14
Pneumonia.....	35
Scarlet fever.....	2
Smallpox.....	1
Typhoid fever.....	6

## GEORGIA.

Cerebrospinal meningitis.....	1
Chicken pox.....	26
Conjunctivitis (acute infectious).....	1
Diphtheria.....	6
Dysentery (bacillary).....	2
German measles.....	2
Hookworm.....	22
Influenza.....	2,066
Malaria.....	19
Measles.....	37
Mumps.....	10
Pneumonia.....	79
Scarlet fever.....	17
Septic sore throat.....	6
Smallpox.....	31
Tuberculosis (pulmonary).....	13
Typhoid fever.....	3
Whooping cough.....	42

## ILLINOIS.

Cerebrospinal meningitis:	
Quincy.....	1
Diphtheria:	
Chicago.....	169
Scattering.....	52
Influenza:	
Chicago.....	163
Scattering.....	267
Lethargic encephalitis:	
Chicago.....	9
Robinson.....	2
Pneumonia:	
Chicago.....	316
Scattering.....	21
Scarlet fever:	
Chicago.....	330
Rockford.....	11
Woodstock.....	13
Scattering.....	89
Smallpox:	
Benton.....	8
Chicago.....	5
Galesburg.....	10
Scattering.....	36
Typhoid fever:	
Chicago.....	6
Scattering.....	13

## INDIANA.

	Cases.
Cerebrospinal meningitis:	
Jay County.....	1
Marion County.....	1
Diphtheria:	
Lake County.....	10
Marion County.....	7
Scattering.....	14
Influenza.....	412
Measles:	
Marion County.....	234
Scattering.....	371
Scarlet fever:	
Elkhart County.....	19
Scattering.....	134
Smallpox:	
Howard County.....	28
Scattering.....	126
Typhoid fever.....	6

## IOWA.

Cerebrospinal meningitis:	
Ankeny.....	1
Diphtheria.....	8
Influenza:	
Davis County.....	11
Scattering.....	11
Measles.....	8
Pneumonia.....	2
Scarlet fever:	
Carroll County.....	7
Des Moines.....	9
Scattering.....	32
Smallpox:	
Butler County.....	8
Colfax.....	9
Davenport.....	19
Scattering.....	60
Whooping cough.....	1

## KANSAS.

Diphtheria.....	33
Influenza.....	1,290
Scarlet fever.....	95
Smallpox.....	114

## LOUISIANA.

Diphtheria.....	8
Influenza.....	1,045
Pneumonia.....	31
Scarlet fever.....	12
Smallpox.....	59
Typhoid fever.....	3

## MAINE.

Chicken pox.....	11
Diphtheria.....	5
Influenza:	
Andover.....	25
Brunswick.....	33
Dixmont.....	40
Ellsworth.....	17
Gray.....	61
Marshall.....	25
Phillips.....	52
Vinal Haven.....	17
Yarmouth.....	46
York.....	23
Scattering.....	509

MAINE—continued.		NEBRASKA—continued.	
Measles:	Cases.	Measles:	Cases.
South Berwick.....	8	Benkelman.....	7
Scattering.....	7	Chappell.....	23
Mumps.....	23	Fremont.....	9
Pneumonia.....	48	Lincoln.....	36
Scarlet fever.....	22	Maxwell.....	13
Smallpox.....	1	Omaha.....	25
Tuberculosis.....	14	Oshkosh.....	46
Typhoid fever.....	8	Scattering.....	32
Whooping cough.....	19	Mumps.....	10
		Scarlet fever:	
MARYLAND. <sup>1</sup>		Omaha.....	19
Chicken pox.....	45	Scattering.....	40
Diphtheria.....	61	Septic sore throat.....	2
Influenza.....	747	Smallpox:	
Lethargic encephalitis.....	1	Chappell.....	18
Measles.....	395	Cheyenne County.....	9
Mumps.....	19	Lincoln.....	26
Ophthalmia neonatorum.....	1	Merrick County.....	10
Pneumonia (all forms).....	176	Nuckolls County.....	7
Scarlet fever.....	75	Omaha.....	11
Septic sore throat.....	4	York.....	15
Smallpox.....	1	Scattering.....	67
Trachoma.....	24	Tuberculosis.....	1
Tuberculosis.....	70	Whooping cough.....	10
Typhoid fever.....	7		
Whooping cough.....	26	NEW JERSEY.	
MASSACHUSETTS.		Influenza.....	171
Actinomycosis.....	1	Pneumonia.....	169
Cerebrospinal meningitis.....	8	Smallpox:	
Chicken pox.....	82	Essex County—Belleville.....	20
Conjunctivitis (suppurative).....	2	NEW MEXICO.	
Diphtheria.....	123	Chicken pox.....	3
Dysentery.....	1	Conjunctivitis.....	1
German measles.....	9	Diphtheria.....	7
Influenza.....	254	Measles.....	18
Malaria.....	1	Mumps.....	17
Measles.....	663	Scarlet fever.....	17
Mumps.....	152	Septic sore throat.....	1
Ophthalmia neonatorum.....	29	Smallpox.....	8
Pneumonia (lobar).....	105	Trachoma.....	3
Pellomyelitis.....	1	Tuberculosis.....	31
Scarlet fever.....	280	Whooping cough.....	1
Septic sore throat.....	1		
Trachoma.....	1	NEW YORK.	
Tuberculosis (all forms).....	178	(Exclusive of New York City.)	
Whooping cough.....	244	Cerebrospinal meningitis:	
MINNESOTA.		Albany.....	1
Smallpox:		Johnson.....	1
Blue Earth County—Beaufort Township.....	11	Diphtheria.....	180
Scattering.....	18	Influenza.....	1,081
MONTANA.		Measles.....	920
Diphtheria.....	14	Pneumonia.....	366
Influenza.....	82	Scarlet fever.....	208
Pneumonia.....	10	Smallpox:	
Scarlet fever.....	8	Fort Covington.....	9
Smallpox.....	19	Scattering.....	9
NEBRASKA.		Typhoid fever.....	8
Cerebrospinal meningitis:		Whooping cough.....	318
Guide Rock.....	1	NORTH CAROLINA.	
Ruskin.....	1	Cerebrospinal meningitis.....	3
Chicken pox.....	39	Chicken pox.....	73
Diphtheria.....	11	Diphtheria.....	22
Influenza.....	849	German measles.....	2
		Measles.....	53

<sup>1</sup> Week ended Friday.<sup>2</sup> Including delayed reports.

## NORTH CAROLINA—continued.

NORTH CAROLINA—continued.		Cases.
Ophthalmia neonatorum.....	1	1
Pneumonia (all forms).....	111	111
Scarlet fever.....	21	21
Septic sore throat.....	1	1
Smallpox.....	113	113
Typhoid fever.....	1	1
Whooping cough.....	104	104

ОППО.

Scarlet fever:		
Akron.....	125	
Cincinnati.....	88	
Smallpox:		
Akron.....	9	
Cuyahoga.....	11	
Urbana.....	12	

## SOUTH CAROLINA.

Influenza:	
Abbeville.....	172
Aiken.....	11
Chesterfield.....	18
Horry.....	9
Lexington.....	10
Marion.....	34
Newberry.....	1
Orangeburg.....	268

<b>Pneumonia:</b>	
Abbeville.....	3
Horry.....	2

SOUTH DAKOTA.

SOUTH DAKOTA.		
Chicken pox.....	6	
Diphtheria.....	4	
Measles.....	89	
Pneumonia.....	10	
Scarlet fever.....	61	
Smallpox.....	19	
Tuberculosis.....	1	
Whooping cough.....	5	

## VERMONT.

VERMONT.	
Chicken pox.....	27
Diphtheria.....	1
Influenza.....	158
Measles.....	98
Mumps.....	77
Pneumonia.....	22
Scarlet fever.....	13
Typhoid fever.....	1
Whooping cough.....	22

**VIRGINIA.**

Smallpox:	Cases.
Lee County, several cases.	

WASHINGTON.

Chicken pox.....	58
Diphtheria.....	13
Influenza.....	93
Measles.....	341
Mumps.....	38
Pneumonia.....	3
Scarlet fever.....	68
Smallpox.....	148
Tuberculosis.....	12
Typhoid fever.....	2
Whooping cough.....	57

WEST VIRGINIA.

Diphtheria.....	11
Measles:	
Wheeling.....	27
Scattering.....	15
Scarlet fever.....	11
Smallpox:	
Bluefield.....	16
Scattering.....	6
Typhoid fever—Bluefield.....	2

## WISCONSIN.

Milwaukee:	
Cerebrospinal meningitis.....	43
Chicken pox.....	4
Diphtheria.....	18
Measles.....	70
Scarlet fever.....	33
Smallpox.....	23
Tuberculosis.....	17
Whooping cough.....	49
Scattering:	
Chickenpox.....	27
Diphtheria.....	21
Influenza.....	503
Measles.....	338
Scarlet fever.....	88
Smallpox.....	110
Tuberculosis.....	16
Trachoma.....	1
Typhoid fever.....	2
Whooping cough.....	46

**Kentucky Report for Week Ended Mar. 13, 1920.**

Cerebrospinal meningitis:	Cases.
Hopkins County.....	1
Jefferson County.....	1
Chancroid.....	4
Chicken pox.....	30
Diphtheria.....	16
Dysentery.....	1
Erysipelas.....	1
Gonorrhea.....	21
Influenza:	
Adair County.....	185
Bell County.....	162
Fleming County.....	145
Green County.....	111
Harrison County.....	130
Henry County.....	108

Influenza—Continued.	Cases.
Knox County.....	116
Livingston County.....	148
Logan County.....	240
McLean County.....	99
Nelson County.....	178
Woodford County.....	315
Scattering.....	1,503
Measles:	
Boyle County.....	12
Caldwell County.....	10
Campbell County.....	21
Fleming County.....	25
Hopkins County.....	12
Kenton County.....	45
McCracken County.....	19

## Kentucky Report for Week Ended Mar. 13, 1920—Continued.

Measles—Continued.	Cases.	Pneumonia—Continued.	Cases.
Muhlenburg County.....	15	Simpson County.....	13
Simpson County.....	15	Scattering.....	97
Todd County.....	12	Scarlet fever:	
Scattering.....	58	Jefferson County.....	13
Mumps.....	25	Kenton County.....	8
Ophthalmia neonatorum.....	1	Scattering.....	26
Pneumonia:		Septic sore throat.....	2
Adair County.....	12	Smallpox:	
Christian County.....	7	Graves County.....	7
Clay County.....	7	Scattering.....	62
Hardin County.....	8	Syphilis.....	15
Jefferson County.....	13	Tonsillitis.....	3
Knox County.....	8	Trachoma.....	8
Lawrence County.....	22	Tuberculosis.....	32
Livingston County.....	8	Typhoid fever.....	2
Logan County.....	12	Whooping cough.....	30
Rockcastle County.....	7		

## SUMMARY OF CASES REPORTED MONTHLY, BY STATES.

Tables showing, by counties, the reported cases of cerebrospinal meningitis, influenza, malaria, pellagra, poliomyelitis, smallpox, and typhoid fever are published under the names of these diseases. (See names of these and other diseases in the table of contents.)

The following monthly State reports include only those which were received during the current week. These reports appear each week as received.

State.	Cerebrospinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
FEBRUARY, 1920.										
Arizona.....		12	800		10			17	19	
Delaware.....		14	244		355			17	4	6
Florida.....		17	5,762	30	98	4	1	18	21	23
Louisiana.....	5	49	12,117	23	115	3		41	232	30
Maine.....		38	11,474		197	1		3	23	19
Maryland.....	4	211	22,234	1	1,267	1	1	417	24	16
Michigan.....		564	38,138		2,736		1	694	339	25
New Mexico.....		16	3,771	1	181		1	45	68	9
New York.....	40	1,816	75,828		11,231		3	1,376	21	50
West Virginia.....	5	145	32,157		402			205	280	40

## ANTHRAX.

## Delaware and New York—February, 1920.

During February, 1920, one case of anthrax was reported in Delaware and three cases were reported in New York.

## CEREBROSPINAL MENINGITIS.

## State Reports for February, 1920.

Place.	New cases reported.	Place.	New cases reported.
Louisiana:		New York—Continued.	
Calcasieu Parish.....	2	Ulster County—	
Lafayette Parish.....	1	Kingston.....	
Orleans Parish.....	1	Westchester County—	
Vermilion Parish.....	1	Port Chester.....	1
Total.....	5	Mamaroneck (town).....	1
Maryland:		Total.....	40
Baltimore.....	4	West Virginia:	
New York:		Braxton County.....	1
Albany County—		Payette County.....	1
Cohoes.....	1	Gilmer County.....	1
Cayuga County—		Harrison County.....	1
Aurora.....	1	Preston County.....	1
Erie County—		Total.....	5
Buffalo.....	1		
Montgomery County—			
Amsterdam.....	1		
New York City.....	32		

## City Reports for Week Ended Mar. 6, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md.....	3	2	Minneapolis, Minn.....	2	
Birmingham, Ala.....	1		Newark, N. J.....	1	
Butte, Mont.....		1	New Bedford, Mass.....	1	
Charlotte, N. C.....	1	1	New Brunswick, N. J.....	1	
Chicago, Ill.....	2		New Haven, Conn.....	1	1
Cleveland, Ohio.....	1		New Orleans, La.....	2	2
Dallas, Tex.....	1		Redlands, Calif.....		1
Detroit, Mich.....	1		San Francisco, Calif.....		1
Fall River, Mass.....	1	2	Savannah, Ga.....	1	1
Fort Wayne, Ind.....	1	1	Trenton, N. J.....	1	1
Huntington, W. Va.....		1	West New York, N. J.....	1	
Ithaca, N. Y.....	1		Wheeling, W. Va.....		1
Lynn, Mass.....		1	Wichita, Kans.....	1	1
Marion, Ohio.....	1				

## DIPHTHERIA.

See Telegraphic weekly reports from States, p. 775; Monthly summaries by States, p. 779; and Weekly reports from cities, p. 792.

## INFLUENZA.

## Maryland Report for February, 1920.

Place	New cases reported.	Place.	New cases reported.
Maryland:		Maryland—Continued.	
Baltimore.....	9,784	Carroll County—	
Allegany County—		Westminster.....	130
Cumberland.....	1,183	Rural districts.....	839
Westernport.....	176	Cecil County—	
Frostburg.....	101	Elkton.....	35
Rural districts.....	526	Rural districts.....	187
Anne Arundel County—		Charles County—	
Annapolis.....	198	Rural districts.....	258
Rural districts.....	433	Indian Head Proving Grounds..	15
Baltimore County—		Dorchester County—	
Rural districts.....	1,076	Cambridge.....	167
Fort Howard.....	7	Rural districts.....	112
Calvert County—		Frederick County—	
Rural districts.....	200	Frederick.....	135
Caroline County—		Brunswick.....	30
Rural districts.....	145	Rural districts.....	643

## INFLUENZA—Continued.

## Maryland Report for February, 1920—Continued.

Place.	New cases reported.	Place.	New cases reported.
Maryland—Continued.		Maryland—Continued.	
Garrett County—		Somerset County—	
Rural districts.....	327	Crisfield.....	59
Harford County—		Rural districts.....	155
Havre de Grace.....	32	Talbot County—	
Rural districts.....	748	Easton.....	19
Howard County—		Rural districts.....	373
Rural districts.....	391	Washington County—	
Kent County—		Hagerstown.....	845
Rural districts.....	93	Rural districts.....	478
Montgomery County—		Wicomico County—	
Rural districts.....	831	Salisbury.....	126
Prince Georges County—		Rural districts.....	101
Hyattsville.....	4	Worcester County—	
Laurel.....	51	Snow Hill.....	121
Rural districts.....	345	Rural districts.....	366
Fort Washington.....	4		
Queen Annes County—		Total.....	22,234
Rural districts.....	247		
St. Marys County—			
Rural districts.....	78		

## City Reports for Week Ended Mar. 6, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Aberdeen, Wash.....	76		Columbia, S. C.....	31	
Akron, Ohio.....	2		Columbus, Ga.....	11	1
Alameda, Calif.....	29	2	Columbus, Ohio.....	83	8
Alton, Ill.....	25		Concord, N. H.....		1
Amesbury, Mass.....	16		Corpus Christi, Tex.....	53	
Ann Arbor, Mich.....	9		Cortland, N. Y.....	5	
Annisson, Ala.....	15		Council Bluffs, Iowa.....		1
Ansonia, Conn.....	4		Covington, Ky.....	66	
Appleton, Wis.....	2		Cranston, R. I.....		1
Asbury Park, N. J.....	8		Cumberland, Md.....	33	3
Ashland, Ky.....	35		Dallas, Tex.....	82	7
Atlanta, Ga.....	237	27	Danbury, Conn.....	24	
Atlantic City, N. J.....	8		Danville, Ill.....	10	
Attleboro, Mass.....	1		Danville, Va.....	123	6
Auburn, Me.....	6		Davenport, Iowa.....	1	
Baltimore, Md.....	309	21	Dayton, Ohio.....	1	
Bangor, Me.....	6		Decatur, Ill.....	1	
Baton Rouge, La.....	2	2	Denver, Colo.....		7
Battle Creek, Mich.....	1		Detroit, Mich.....	6	15
Bayonne, N. J.....	3		Du Bois, Pa.....	31	1
Beaumont, Tex.....	1	1	Duluth, Minn.....	7	2
Berkeley, Calif.....	53	3	Durham, N. C.....		8
Beverly, Mass.....	6		East Orange, N. J.....	6	
Biddeford, Me.....	1	1	East St. Louis, Ill.....	4	
Binghamton, N. Y.....	52	4	Eau Claire, Wis.....	6	
Birmingham, Ala.....	103	35	Elizabeth, N. J.....	2	1
Bloomington, Ill.....	2	2	Elkhart, Ind.....	3	
Boston, Mass.....	143	27	El Paso, Tex.....		8
Brazil, Ind.....	28	2	Erie, Pa.....	10	3
Bridgeport, Conn.....	48	7	Eureka, Calif.....	90	1
Bristol, Conn.....	20	1	Everett, Mass.....	4	
Brocton, Mass.....	1		Fairmont, W. Va.....	2	
Brookline, Mass.....	4		Fall River, Mass.....	32	5
Brunswick, Ga.....	95	3	Findlay, Ohio.....	113	
Buffalo, N. Y.....	32	12	Flint, Mich.....		1
Burlington, Iowa.....	2		Fort Scott, Kans.....	1	
Burlington, Vt.....	2	2	Fort Wayne, Ind.....	2	2
Cadillac, Mich.....	12	1	Fort Worth, Tex.....		1
Calro, Ill.....	13		Fortoria, Ohio.....	4	
Cambridge, Mass.....	29	1	Fremont, Ohio.....	1	
Canton, Ill.....		3	Fresno, Calif.....	65	4
Charleston, S. C.....	46	5	Galesburg, Ill.....	7	1
Charleston, W. Va.....	3		Galveston, Tex.....	2	1
Charlotte, N. C.....	9		Gardner, Mass.....	2	
Chattanooga, Tenn.....	28	5	Gary, Ind.....		2
Cheyenne, Wyo.....	2	2	Grand Rapids, Mich.....	51	1
Chicago, Ill.....	321	51	Granite City, Ill.....	5	
Chillicothe, Ohio.....	4		Great Falls, Mont.....	64	
Cincinnati, Ohio.....	165	41	Green Bay, Wis.....	1	
Cleveland, Ohio.....	72	24	Greenfield, Mass.....		1
Coffeyville, Kans.....	27		Greenwich, Conn.....	1	1
Cohoes, N. Y.....	12		Hackensack, N. J.....	23	

## INFLUENZA—Continued.

## City Reports for Week Ended Mar. 6, 1920—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Harrison, N. J.	1		Parsons, Kans.	3	
Hartford, Conn.	2	3	Pasadena, Calif.	18	2
Haverhill, Mass.	22	3	Passaic, N. J.	18	
Highland Park, Mich.	4		Paterson, N. J.	17	
Hogutiam, Wash.	124		Pawtucket, R. I.	18	2
Hot Springs, Ark.	94	1	Peoria, Ill.	1	1
Houston, Tex.	4	3	Perth Amboy, N. J.	1	
Huntington, W. Va.		7	Petersburg, Va.	20	1
Hutchinson, Kans.	5		Philadelphia, Pa.	87	56
Indianapolis, Ind.	16	18	Piqua, Ohio.	25	
Ironwood, Mich.	34	5	Pittsfield, Mass.		1
Ishpeming, Mich.	27		Plainfield, N. J.	2	
Ithaca, N. Y.	3	2	Portland, Me.	4	1
Jacksonville, Ill.	2	1	Portland, Oreg.	154	21
Jamestown, N. Y.	9		Portsmouth, N. H.	13	
Jersey City, N. J.	4		Portsmouth, Ohio.	1	1
Kalamazoo, Mich.	18	2	Portsmouth, Va.	15	2
Kansas City, Kans.	8		Poughkeepsie, N. Y.	81	
Kansas City, Mo.	7	15	Providence, R. I.	84	14
Kearny, N. J.	13	1	Quincy, Mass.	5	
Keene, N. H.	13		Racine, Wis.	5	
Kenosha, Wis.	11		Raleigh, N. C.	24	3
Knoxville, Tenn.	49		Redlands, Calif.	6	
Lackawanna, N. Y.	13		Reno, Nev.	9	
La Crosse, Wis.	2		Richmond, Va.	32	3
Lancaster, Pa.	1		Riverside, Calif.	58	
Lawrence, Kans.	1		Roanoke, Va.	9	1
Lawrence, Mass.	2	2	Rochester, N. Y.	25	3
Leavenworth, Kans.	1		Rocky Mount, N. C.		1
Leominster, Mass.	11		Rome, Ga.	241	24
Lexington, Ky.		3	Rome, N. Y.	1	
Lincoln, Nebr.	2		Rutland, Vt.	20	
Little Rock, Ark.	42		Sacramento, Calif.	39	1
Lockport, N. Y.	2	1	St. Cloud, Minn.	3	
Long Beach, Calif.	12		St. Joseph, Mo.	15	
Long Branch, N. J.	2		St. Paul, Minn.	2	2
Lorain, Ohio.	3		Salem, Oreg.	15	
Los Angeles, Calif.	358	8	Salina, Kans.	6	1
Louisville, Ky.	55	6	Salt Lake City, Utah.	12	2
Lowell, Mass.	59	2	San Bernardino, Calif.	6	
Lynchburg, Va.	5	3	San Diego, Calif.	27	4
Lynn, Mass.	18	4	Sanford, Me.	20	
Manchester, N. H.		9	San Francisco, Calif.	340	31
Mankato, Minn.	2		Saratoga Springs, N. Y.	64	1
Mason City, Iowa.	2		Savannah, Ga.	167	14
Medford, Mass.	10	1	Schenectady, N. Y.	7	2
Melrose, Mass.	1		Sheboygan, Wis.	3	
Memphis, Tenn.	23	5	Sioux Falls, S. Dak.		1
Middletown, N. Y.	16		Somerville, Mass.	26	2
Milwaukee, Wis.	7		Southbridge, Mass.	13	1
Minneapolis, Minn.	16	5	Spartanburg, S. C.	4	
Missoula, Mont.	5		Springfield, Mass.	9	2
Mobile, Ala.	19	4	Springfield, Mo.		1
Montclair, N. J.	1		Springfield, Ohio.	1	1
Montgomery, Ala.	47	12	Staunton, Va.	25	
Morgantown, W. Va.	31		Steelton, Pa.		1
Morristown, N. J.	1		Syracuse, N. Y.	14	1
Muncie, Ind.	1		Tacoma, Wash.	14	
Nashville, Tenn.	153	24	Taunton, Mass.	7	3
Newark, N. J.	150	9	Terre Haute, Ind.		2
New Bedford, Mass.	17		Tiffin, Ohio.	1	
New Britain, Conn.	25	6	Toledo, Ohio.	2	6
Newburyport, Mass.	9		Topeka, Kans.	12	1
New Haven, Conn.	42	12	Traverse City, Mich.	5	
New London, Conn.	9		Trenton, N. J.	36	1
New Orleans, La.	261	27	Troy, N. Y.	3	1
Newport, R. I.	8	3	Waltham, Mass.	19	2
Newton, Mass.	4		Washington, D. C.	21	5
New York, N. Y.	489	82	Watertown, N. Y.	25	
Niagara Falls, N. Y.	45	1	Warsaw, Wis.	14	
North Adams, Mass.	11	5	Westfield, Mass.	21	
Northampton, Mass.	2		West Hoboken, N. J.	2	
North Little Rock, Ark.	17		West Orange, N. J.	7	
North Tonawanda, N. Y.	17		Wheeling, W. Va.	5	8
Norwich, Conn.	1		Wichita, Kans.	2	5
Oakland, Calif.	68	10	Wilkinsburg, Pa.	3	2
Oak Park, Ill.	3		Winchester, Mass.	1	
Oklahoma City, Okla.	5	2	Winona, Minn.	1	
Omaha, Nebr.	3	3	Winston-Salem, N. C.	26	3
Orange, N. J.	8		Winthrop, Mass.	5	
Oshkosh, Wis.	1		Woburn, Mass.		1
Paducah, Ky.	23		Worcester, Mass.	39	13
Parkersburg, W. Va.		1	Zanesville, Ohio.		1

**LEPROSY.****California and Louisiana.**

During February, 1920, one case of leprosy was reported at Pacton, Winn Parish, La. During the week ended March 6, 1920, one death from leprosy was reported at San Francisco, Calif.

**LETHARGIC ENCEPHALITIS.****California, Louisiana, Maryland, and Michigan.**

During February, 1920, one case of lethargic encephalitis was reported in Louisiana, two cases were reported in Maryland, and three cases were reported in Maine. During the week ended March 6, 1920, two cases and two deaths were reported at San Francisco, Calif.

**MALARIA.****State Reports for February, 1920.**

Place.	New cases reported.	Place.	New cases reported.
<b>Florida:</b>		<b>Louisiana—Continued:</b>	
Alachua County.....	1	East Carroll Parish.....	1
Calhoun County.....	1	Evangeline Parish.....	2
Citrus County.....	3	La Salle Parish.....	4
Columbia County.....	1	Ouachita Parish.....	2
Duval County.....	5	Rapides Parish.....	1
Jacksonville.....	3	St. Landry Parish.....	1
Escambia County.....	3	St. Martin Parish.....	1
Pensacola.....	3	Winn Parish.....	7
Gadsden County.....	4	Total.....	23
Jackson County.....	3	<b>Maryland:</b>	
Lafayette County.....	2	Baltimore County—	
Leon County.....	1	Lake Roland.....	1
Total.....	30	<b>New Mexico:</b>	
<b>Louisiana:</b>		Roosevelt County.....	1
Acadia Parish.....	1		
De Soto Parish.....	3		

**City Reports for Week Ended Mar. 6, 1920.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
El Paso, Tex.....		1	New York, N. Y.....	1	
Fort Worth, Tex.....	1	1	Rockford, Ill.....	1	

**MEASLES.**

See telegraphic weekly reports from States, p. 775; Monthly summaries by States, p. 779; and Weekly reports from cities, p. 792.

## PELLAGRA.

## State Reports for February, 1920.

Place.	New cases reported.	Place.	New cases reported.
Florida:		Louisiana—Continued.	
Duval County—		Rapides Parish.....	1
Jacksonville.....	1	Total.....	3
Escambia County—			
Pensacola.....	1	Maine:	
Flagler County.....	1	Lincoln County—	
Palin Beach County.....	1	Waldoboro (town).....	1
Total.....	4		
Louisiana:		Maryland:	
Concordia Parish.....	1	Montgomery County—	
Orleans Parish.....	1	Takoma Park.....	1

## City Reports for Week Ended Mar. 6, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Charleston, S. C.....		1	Portsmouth, Va.....		1
Lexington, Ky.....		1	Savannah, Ga.....		1
Montgomery, Ala.....		1			

## PLAGUE (RODENT).

## New Orleans, La.

During the period from March 6 to March 18, 1920, inclusive, seven plague-infected rats were confirmed in New Orleans, La. Two of these were *Mus alexandrinus* and five were *Mus norvegicus*.

## PNEUMONIA (ALL FORMS).

## City Reports for Week Ended Mar. 6, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Aberdeen, Wash.....	2		Binghamton, N. Y.....	9	9
Akron, Ohio.....	3		Birmingham, Ala.....		41
Alameda, Calif.....	2		Bloomfield, N. J.....	1	1
Albany, N. Y.....	13		Bloomington, Ill.....		2
Alliance, Ohio.....		1	Boston, Mass.....	126	53
Alpena, Mich.....	3		Bradford, Ind.....		1
Alton, Ill.....	1	1	Bridgeport, Conn.....		9
Amesbury, Mass.....	1		Bristol, Conn.....	7	4
Ann Arbor, Mich.....	2	2	Brockton, Mass.....	6	5
Anniston, Ala.....	1		Brookline, Mass.....	1	1
Ansonia, Conn.....		1	Brunswick, Ga.....	3	2
Asbury Park, N. J.....	1		Buffalo, N. Y.....	50	44
Ashland, Ky.....	5		Burlington, Iowa.....		5
Ashtabula, Ohio.....		1	Burlington, Vt.....	1	5
Atlanta, Ga.....	1	19	Butte, Mont.....	1	6
Atlantic City, N. J.....	9	4	Cadillac, Mich.....	8	3
Attleboro, Mass.....		2	Cairo, Ill.....		8
Aurora, Ill.....	1		Cambridge, Mass.....	7	3
Austin, Tex.....		2	Canton, Ill.....	7	
Baltimore, Md.....	157	56	Charleston, S. C.....	2	17
Barberton, Ohio.....		1	Charleston, W. Va.....	1	3
Baton Rouge, La.....	1	1	Charlotte, N. C.....	3	5
Battle Creek, Mich.....	3		Chattanooga, Tenn.....		9
Bayonne, N. J.....	1		Chelsea, Mass.....		6
Beatrice, Nebr.....		1	Cheyenne, Wyo.....	5	
Beaumont, Tex.....	2	2	Chicago Heights, Ill.....		3
Berkeley, Calif.....	1		Chicago, Ill.....	286	69
Beverly, Mass.....		2	Chicopee, Mass.....		7
Biddeford, Me.....	2	6	Chillicothe, Ohio.....		1

<sup>1</sup> Lobar only.

## PNEUMONIA (ALL FORMS)—Continued.

## City Reports for Week Ended Mar. 6, 1920—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Cincinnati, Ohio.....	35	32	Little Rock, Ark.....	6	
Cleveland, Ohio.....	36	4	Kalamazoo, Mich.....	5	5
Clinton, Mass.....		1	Kansas City, Kans.....	4	
Cohoes, N. Y.....	5	3	Kansas City, Mo.....	16	14
Columbus, Ga.....	7	8	Kearny, N. J.....	2	3
Columbus, Ohio.....		11	Keene, N. H.....	1	
Concord, N. H.....	4	4	Kokomo, Ind.....		2
Covington, Ky.....	4	12	Lockport, N. Y.....	3	
Cranston, R. I.....	1	1	Logansport, Ind.....		4
Cumberland, Me.....	6		Long Beach, Calif.....	2	2
Dallas, Tex.....	13	8	Long Branch, N. J.....	1	2
Danville, Ill.....		4	Lorain, Ohio.....		1
Dayton, Ohio.....	6		Los Angeles, Calif.....	73	41
Decatur, Ill.....		2	Louisville, Ky.....	26	14
Denver, Colo.....		10	Lowell, Mass.....	7	25
Detroit, Mich.....	47	63	Ludington, Mich.....	4	3
Dover, N. H.....	1	1	Lynchburg, Va.....		1
Duluth, Minn.....		1	Lynn, Mass.....	7	10
Durham, N. C.....	4	2	Malden, Mass.....		1
East Chicago, Ind.....		2	Manchester, Conn.....	1	
Easthampton, Mass.....	2		Manchester, N. H.....	5	5
East Orange, N. J.....	6	1	Mankato, Minn.....		1
East St. Louis, Ill.....		2	Marion, Ind.....	1	1
Elizabeth, N. J.....	1	5	Marlboro, Mass.....	6	1
Elkhart, Ind.....		5	Mason City, Iowa.....		1
Elmira, N. Y.....	1	2	Mattoon, Ill.....	1	
El Paso, Tex.....		1	Medford, Mass.....		3
Englewood, N. J.....		1	Memphis, Tenn.....		31
Eureka, Calif.....		1	Methuen, Mass.....	2	2
Evanston, Ill.....	1		Middletown, N. Y.....	7	1
Everett, Mass.....		3	Milwaukee, Wis.....		15
Fall River, Mass.....	16	13	Minneapolis, Minn.....		3
Flint, Mich.....	5	5	Mobile, Ala.....	1	5
Fort Dodge, Iowa.....		2	Monmouth, Ill.....		4
Fort Scott, Kans.....	1	4	Montclair, N. J.....	2	
Fort Wayne, Ind.....		5	Montgomery, Ala.....	12	5
Fort Worth, Tex.....	10	10	Morgantown, W. Va.....	2	2
Freeport, Ill.....		2	Morristown, N. J.....		1
Fremont, Ohio.....	1		Muncie, Ind.....		6
Fresno, Calif.....		3	Muscatine, Iowa.....		1
Galesburg, Ill.....	3	3	Nashville, Tenn.....		9
Gardner, Mass.....		4	Newark, N. J.....	87	26
Gary, Ind.....	3	3	New Bedford, Mass.....	3	20
Geneva, N. Y.....	1		New Britain, Conn.....	3	4
Glens Falls, N. Y.....	3	3	Newburyport, Mass.....	1	1
Grand Rapids, Mich.....	19	4	New Haven, Conn.....		11
Granite City, Ill.....	2		New London, Conn.....	7	3
Great Falls, Mont.....	7	12	New Orleans, La.....	10	29
Greenfield, Mass.....	3	1	Newport, R. I.....	2	5
Greensboro, N. C.....		10	Newton, Mass.....	1	5
Hackensack, N. J.....	2	1	New York, N. Y.....	538	287
Hammond, Ind.....		1	Niagara Falls, N. Y.....	21	9
Hartford, Conn.....	1	9	Norfolk, Va.....	4	
Haverhill, Mass.....	2	2	North Adams, Mass.....	2	3
Highland Park, Mich.....	4	3	Northampton, Mass.....	1	1
Hoboken, N. J.....		4	North Attleboro, Mass.....	6	3
Holland, Mich.....	3	1	North Little Rock, Ark.....	2	
Holyoke, Mass.....	3	9	North Tonawanda, N. Y.....	2	
Hoquiam, Wash.....	7		Norwalk, Conn.....		1
Hot Springs, Ark.....		11	Norwich, Conn.....	1	1
Houston, Tex.....	10	6	Norwood, Ohio.....		1
Huntington, W. Va.....		8	Oakland, Calif.....	2	7
Hutchinson, Kans.....	1	3	Oak Park, Ill.....	4	3
Independence, Mo.....	1	1	Oklahoma City, Okla.....		3
Indianapolis, Ind.....		23	Olean, N. Y.....		4
Ironton, Ohio.....	2		Omaha, Nebr.....		16
Ironwood, Mich.....		1	Orange, Conn.....		2
Irrington, N. J.....	2		Orange, N. J.....	5	5
Ishpeming, Mich.....	1	1	Paducah, Ky.....	1	
Ithaca, N. Y.....	6		Parkersburg, W. Va.....		1
Jamestown, N. Y.....	1		Parsons, Kans.....	4	
Jefferson City, Mo.....		4	Pasadena, Calif.....		1
Jersey City, N. J.....	13		Passaic, N. J.....	6	4
Lackawanna, N. Y.....	5	1	Pawtucket, R. I.....	6	6
Lancaster, Ohio.....	1	1	Peoria, Ill.....		7
Lawrence, Mass.....	2	3	Perth Amboy, N. J.....		1
Leominster, Mass.....	3	1	Petersburg, Va.....		1
Lexington, Ky.....	2	15	Philadelphia, Pa.....	210	161
Lima, Ohio.....	2		Phillipsburg, N. J.....		1
Lincoln, Nebr.....		2	Piqua, Ohio.....	1	1

## PNEUMONIA (ALL FORMS)—Continued.

## City Reports for Week Ended Mar. 6, 1920—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Pittsfield, Mass.	1	2	Sault Ste. Marie, Mich.		1
Plainfield, N. J.	2		Savannah, Ga.		8
Plymouth, Mass.		3	Schenectady, N. Y.	10	2
Pontiac, Mich.	3	3	Sioux Falls, S. Dak.	2	1
Port Huron, Mich.	3	3	Somerville, Mass.	2	1
Portland, Me.	2	10	South Bend, Ind.		1
Portland, Oreg.		7	Southbridge, Mass.	3	1
Portsmouth, N. H.	4		Springfield, Ill.		4
Portsmouth, Ohio	3	3	Springfield, Mo.		10
Portsmouth, Va.	6	12	Springfield, Ohio		2
Poughkeepsie, N. Y.	1	1	Staunton, Va.		6
Providence, R. I.		23	Syracuse, N. Y.	6	10
Pueblo, Colo.	2	2	Tacoma, Wash.	13	
Quincy, Mass.		5	Taunton, Mass.	2	3
Raleigh, N. C.	9	12	Terre Haute, Ind.	1	8
Reno, Nev.	3	2	Tiffin, Ohio.		1
Richmond, Ind.	1	1	Toledo, Ohio.		9
Richmond, Va.		10	Topeka, Kans.	4	
Riverside, Calif.	1	1	Trenton, N. J.	4	11
Roanoke, Va.	5	3	Troy, N. Y.	11	4
Rochester, N. Y.	11	9	Vallejo, Calif.		3
Rockford, Ill.		3	Waco, Tex.		2
Rock Island, Ill.	2	3	Washington, D. C.		10
Rocky Mount, N. C.		2	Watertown, Mass.	1	1
Rome, Ga.	10		Watertown, N. Y.	4	3
Rome, N. Y.	2		Wausau, Wis.		1
Rutland, Vt.		1	West Hoboken, N. J.		1
Sacramento, Calif.	3	4	West New York, N. J.		4
St. Joseph, Mo.	5	3	West Orange, N. J.	3	1
St. Paul, Minn.		6	Wheeling, W. Va.	4	6
Salem, Mass.	11	8	Wichita, Kans.	5	5
Salina, Kans.	1		Wilmington, Del.		13
Salt Lake City, Utah		6	Winona, Minn.		1
San Bernardino, Calif.		5	Winston-Salem, N. C.	12	4
San Diego, Calif.	3	3	Woburn, Mass.		1
Sandusky, Ohio.	3	3	Worcester, Mass.	19	20
Sanford, Me.	3		Yonkers, N. Y.	7	4
San Francisco, Calif.	15	8	Zanesville, Ohio.		6
Saratoga Springs, N. Y.	6				

## POLIOMYELITIS (INFANTILE PARALYSIS).

## State Reports for February, 1920.

Place.	New cases reported.	Place.	New cases reported.
Florida:		New Mexico:	
Jackson County.....	1	Dona Ana County.....	1
Maryland:		New York:	
Baltimore.....	1	Monroe County—	
Michigan:		Rochester.....	1
Jackson County.....	1	New York City.....	2
		Total.....	3

## City Reports for Week Ended Mar. 6, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Boston, Mass.	1		New York, N. Y.	1	
Geneva, N. Y.	1		Rochester, N. Y.		1

# RABIES IN ANIMALS.

Akron, Ohio, Bayonne, N. J., and Cincinnati, Ohio.

During the week ended March 6, 1920, one case of rabies in animals was reported at Akron, Ohio, one at Bayonne, N. J., and one at Cincinnati, Ohio.

# SCARLET FEVER.

See Telegraphic weekly reports from States, p. 775; Monthly summaries by States, p. 779; and Weekly reports from cities, p. 792.

# SMALLPOX.

State Reports for February, 1920—Vaccination Histories.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Vaccinated within 7 years preceding attack.	Last vaccinated more than 7 years preceding attack.	Never successfully vaccinated.	History not obtained or uncertain.
<b>Delaware:</b>						
Wilmington County.....	1				1	
Millford County.....	2				2	
Laurel County.....	1				1	
Total.....	4				4	
<b>Florida:</b>						
Dade County—						
Miami.....	5					5
Duval County.....	1					1
Escambia County.....	7				6	1
Pensacola.....	1				1	
Hamilton County.....	5				4	1
Suwanee County.....	2					2
Total.....	21				11	10
<b>Maryland:</b>						
Baltimore.....	5				5	
Allegany County—						
Cumberland, R. D.....	1				1	
Rush.....	1				1	
Mapleside.....	5				5	
Barton.....	1				1	
McCool.....	4				4	
Cumberland.....	1				1	
Garrett County—						
Kitzmiller.....	1				1	
Washington County—						
Hagerstown.....	5				5	
Total.....	24				24	
<b>Michigan:</b>						
Alger County.....	2				1	1
Allegan County.....	1				1	
Baraga County.....	6		1	1	3	
Barry County.....	2				2	
Berrien County.....	3		3			
Branch County.....	4				2	2
Cass County.....	3					3
Charlevoix County.....	15		1		14	
Cheboygan County.....	12				12	
Clare County.....	2					2
Clinton County.....	1				1	
Crawford County.....	2		2			
Delta County.....	2			1	1	
Eaton County.....	11				8	3
Genesee County.....	21		2		1	18
Gogebie County.....	15		4		8	32
Gratiot County.....	1				1	
Houghton County.....	22			1	14	7

## SMALLPOX—Continued.

## State Reports for February, 1920—Vaccination Histories—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Vaccinated within 7 years preceding attack.	Last vaccinated more than 7 years preceding attack.	Never successfully vaccinated.	History not obtained or uncertain
Michigan—Continued.						
Ingham County.....	15		2	2	9	2
Ionia County.....	4		2		2	
Jackson County.....	1		1		1	
Kalamazoo County.....	13				6	7
Kalkaska County.....	4				4	
Kent County.....	13				1	12
Lapeer County.....	1				1	
Luce County.....	2				1	1
Macomb County.....	3			1	2	
Marquette County.....	2		1			1
Mason County.....	4		1		4	
Merom County.....	1				1	
Menominee County.....	1					1
Montmorency County.....	1				1	
Muskegon County.....	4		4			
Oakland County.....	12				8	4
Oceana County.....	4				2	2
Ontonagon County.....	10				10	
Otsego County.....	5				5	
Schoolcraft County.....	7		1		4	2
Shiawassee County.....	3				1	2
St. Joseph County.....	1					1
Tuscola County.....	2				2	
Van Buren County.....	10		1		4	5
Washtenaw County.....	3				3	
Wayne County.....	88		1	3	38	46
Total.....	339		25	9	179	126
New Mexico:						
Bernalillo County.....	1				1	
Chaves County.....	1					1
Dona Ana County.....	3					3
Eddy County.....	2				2	
Grant County.....	1				1	
Hidalgo County.....	3			1		2
Lincoln County.....	1				1	
McKinley County.....	1					1
Otero County.....	11		1		7	3
Rio Arriba County.....	1					1
Roosevelt County.....	4				3	1
San Juan County.....	7				7	
Santa Fe County.....	1				1	
Sierra County.....	12				12	
Socorro County.....	6		2		4	
Torrance County.....	5				5	
Union County.....	7				5	2
Valencia County.....	1				1	
Total.....	68		3	1	50	14
New York:						
Cattaraugus County—						
Allegany (town).....	1			1		
Erle County—						
Buffalo.....	10				10	
Livinston County—						
Groveland (town).....	1				1	
New York City.....	2					2
Niagara County.....						
Royalton (town).....	1				1	
Orance County—						
Warwick.....	6				6	
Total.....	21			1	18	2

## SMALLPOX—Continued.

## State Reports for February, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
<b>Arizona:</b>			<b>Maine—Continued.</b>		
Apache County.....	1	.....	Aroostook County—		
Maricopa County.....	8	.....	Van Buren (town)....	2	.....
Mohave County.....	1	.....	Franklin County—		
Pinal County.....	1	.....	Rangeley (town).....	1	.....
Yavapai County.....	5	.....	Jay (town).....	5	.....
Yuma County.....	3	.....	Penobscot County—		
<b>Total.....</b>	<b>19</b>	<b>.....</b>	Brewer.....	1	.....
<b>Louisiana:</b>			Waldo County—		
Ascension Parish.....	1	.....	Stockton Springs		
Assumption Parish.....	2	.....	(town).....	2	.....
Bossier Parish.....	1	.....	<b>Total.....</b>	<b>23</b>	<b>.....</b>
Caddo Parish.....	18	.....			
East Baton Rouge Parish.	1	.....	<b>West Virginia:</b>		
East Carroll Parish.....	13	.....	Barbour County.....	10	.....
East Feliciana Parish.....	6	.....	Braxton County.....	3	.....
Iberia Parish.....	1	.....	Cabell County.....	4	.....
Iberville Parish.....	15	.....	Doddridge County.....	2	.....
Jefferson Parish.....	1	.....	Fayette County.....	26	.....
Lafourche Parish.....	1	.....	Greenbrier County.....	4	.....
Lincoln Parish.....	1	.....	Hancock County.....	5	.....
Morehouse Parish.....	1	.....	Harrison County.....	24	.....
Natchitoches Parish.....	6	.....	Kanawha County.....	48	.....
Orleans Parish.....	128	.....	McDowell County.....	50	.....
Ouachita Parish.....	11	.....	Marion County.....	4	.....
Rapides Parish.....	2	.....	Marshall County.....	1	.....
Richland Parish.....	2	.....	Mercer County.....	32	.....
St. James Parish.....	1	.....	Mineral County.....	6	.....
Vermilion Parish.....	1	.....	Mingo County.....	2	.....
Washington Parish.....	5	.....	Monongalia County.....	1	.....
West Carroll Parish.....	13	.....	Monroe County.....	2	.....
West Feliciana Parish.....	1	.....	Preston County.....	1	.....
<b>Total.....</b>	<b>232</b>	<b>.....</b>	Raleigh County.....	11	.....
<b>Maine:</b>			Randolph County.....	20	.....
Androscoggin County—			Taylor County.....	5	.....
Auburn.....	2	.....	Upshur County.....	4	.....
East Livermore			Wayne County.....	3	.....
(town).....	4	.....	Wirt County.....	2	.....
Lewiston.....	6	.....	Wyoming County.....	10	.....
			<b>Total.....</b>	<b>280</b>	<b>.....</b>

## City Reports for Week Ended Mar. 6, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio.....	7	.....	Denver, Colo.....	42	.....
Alliance, Ohio.....	2	.....	Des Moines, Iowa.....	1	.....
Alton, Ill.....	1	.....	Detroit, Mich.....	21	.....
Appleton, Wis.....	4	.....	Dubuque, Iowa.....	6	.....
Atlanta, Ga.....	11	.....	East St. Louis, Ill.....	1	.....
Auburn, Me.....	4	.....	El Paso, Tex.....	1	.....
Baltimore, Md.....	2	.....	Everett, Wash.....	2	.....
Baton Rouge, La.....	3	.....	Findlay, Ohio.....	2	.....
Battle Creek, Mich.....	2	.....	Fond du Lac, Wis.....	1	.....
Beatrice, Nebr.....	1	.....	Fort Dodge, Iowa.....	2	.....
Bellingham, Wash.....	5	.....	Fort Scott, Kans.....	1	.....
Birmingham, Ala.....	11	.....	Fort Smith, Ark.....	1	.....
Bluefield, W. Va.....	4	.....	Fort Worth, Tex.....	5	.....
Boise, Idaho.....	5	.....	Galesburg, Ill.....	2	.....
Canton, Ohio.....	8	.....	Gary, Ind.....	1	.....
Cedar Rapids, Iowa.....	1	.....	Grand Rapids, Mich.....	9	.....
Chattanooga, Tenn.....	1	.....	Great Falls, Mont.....	2	.....
Chicago, Ill.....	9	.....	Green Bay, Wis.....	11	.....
Chillicothe, Ohio.....	1	.....	Highland Park, Mich.....	2	.....
Cincinnati, Ohio.....	1	.....	Hogquiam, Wash.....	5	.....
Cleveland, Ohio.....	1	.....	Hot Springs, Ark.....	1	.....
Clinton, Iowa.....	7	.....	Houston, Tex.....	1	.....
Columbus, Ga.....	1	.....	Huntington, Ind.....	4	.....
Columbus, Ohio.....	1	.....	Huntington, W. Va.....	7	.....
Council Bluffs, Iowa.....	2	.....	Indianapolis, Ind.....	7	.....
Dallas, Tex.....	34	.....	Ironwood, Mich.....	2	.....
Danville, Ill.....	2	.....	Janesville, Wis.....	1	.....
Davenport, Iowa.....	15	.....	Kansas City, Kans.....	2	.....
Dayton, Ohio.....	5	.....	Kansas City, Mo.....	8	.....
Decatur, Ill.....	4	.....	Kenosha, Wis.....	4	.....

## SMALLPOX—Continued.

## City Reports for Week Ended Mar. 6, 1920—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Knoxville, Tenn.	1		Pontiac, Mich.	1	
Kokomo, Ind.	7		Portland, Oreg.	50	
La Fayette, Ind.	1		Portsmouth, Ohio.	3	1
Lincoln, Nebr.	4		Portsmouth, Va.	3	
Logansport, Ind.	3		Pueblo, Colo.	2	
Long Beach, Calif.	7		Racine, Wis.	1	
Los Angeles, Calif.	13		Richmond, Ind.	2	
Ludington, Mich.	2		Roanoke, Va.	1	
Lynchburg, Va.	1		Rock Island, Ill.	3	
Madison, Wis.	1		St. Joseph, Mo.	22	
Mankato, Minn.	1		St. Louis, Mo.	7	
Marinette, Wis.	1		St. Paul, Minn.	30	
Marion, Ind.	1		Salt Lake City, Utah.	12	
Marion, Ohio.	4		San Bernardino, Calif.	2	
Marshalltown, Iowa.	5		San Francisco, Calif.	8	
Mason City, Iowa.	4		Sheboygan, Wis.	1	
Memphis, Tenn.	4		Sioux City, Iowa.	2	
Milwaukee, Wis.	15		Sioux Falls, S. Dak.	3	
Minneapolis, Minn.	24		South Bend, Ind.	9	
Mobile, Ala.	8		Spartanburg, S. C.	5	
Muskogee, Okla.	1		Spokane, Wash.	44	
Nashville, Tenn.	1		Superior, Wis.	18	
New Orleans, La.	40	5	Tacoma, Wash.	7	
Norfolk, Va.	7		Terre Haute, Ind.	7	
Oakland, Calif.	1		Vancouver, Wash.	6	
Ogden, Utah.	10		Waco, Tex.	1	
Oklahoma City, Okla.	3		Walla Walla, Wash.	7	
Omaha, Nebr.	9		Washington, D. C.	1	
Oshkosh, Wis.	2		Wausau, Wis.	1	
Paducah, Ky.	3		Wichita, Kans.	15	
Parsons, Kans.	1		Winston-Salem, N. C.	4	
Philadelphia, Pa.	1		Yakima, Wash.	12	
Piqua, Ohio.	2		Zanesville, Ohio.	1	

## TETANUS.

## Los Angeles, Calif., Rock Island, Ill., and Winston-Salem, N. C.

During the week ended March 6, 1920, two cases and one death from tetanus were reported at Los Angeles, Calif., one case at Rock Island, Ill., and one death at Winston-Salem, N. C.

## TUBERCULOSIS.

See Telegraphic weekly reports from States, p. 775, and Weekly reports from cities, p. 792.

## TYPHOID FEVER.

## State Reports for February, 1920.

Place.	New cases reported.	Place.	New cases reported.
Delaware:		Florida—Continued.	
New Castle County.	1	Folk County.	2
Edgemoor.	1	St. Lucie County.	1
Milton.	1	Seminole County.	2
Willford.	1	Volusia County.	8
Wilmington.	2	Total.	23
Total.	6	Louisiana:	
Florida:		Acadia Parish.	1
DeSoto County.	1	Averyelles Parish.	9
Escambia County—		Caddo Parish.	3
Pensacola.	3	East Baton Rouge Parish.	6
Manatee County.	1	Lafayette Parish.	1
Marion County.	1	Lafourche Parish.	2
Pasco County.	2	Orleans Parish.	1
Pinellas County.	2	Pointe Coupee Parish.	1

**TYPHOID FEVER—Continued.**  
**State Reports for February, 1920—Continued.**

Place.	New cases reported.	Place.	New cases reported.
<b>Louisiana—Continued.</b>		<b>New York—Continued.</b>	
St. James Parish.....	1	Cattaraugus County—	
St. Martin Parish.....	1	Cattaraugus.....	1
Terrebonne Parish.....	3	Cayuga County—	
Vernon Parish.....	1	Auburn.....	2
Total.....	30	Erie County—	
<b>Maine:</b>		Buffalo.....	4
Androscoggin County—		Lackawanna.....	1
Lewiston.....	2	Hamburg.....	1
Aroostook County—		West Seneca (town).....	1
Blaine (town).....	1	Essex County—	
Mapleton (town).....	1	Lake Placid.....	1
Presque Isle (town).....	2	Fulton County—	
Van Buren (town).....	1	Johnstown.....	1
Cumberland County—		Jefferson County—	
Portland.....	6	Wilna (town).....	1
Kennebec County—		New York City.....	14
Waterville.....	2	Niagara County—	
Penobscot County—		Niagara Falls.....	1
Old Town.....	3	Oneida County—	
Piscataquis County—		Utica.....	1
Milo.....	1	Onondaga County—	
Total.....	19	Otisco (town).....	1
<b>Maryland:</b>		Ontario County—	
Baltimore.....	4	Geneva (town).....	1
Anne Arundel County—		Seneca (town).....	1
Annapolis.....	2	Orleans County—	
Baltimore County—		Medina.....	1
Garrison.....	1	Otsego County—	
Cecil County—		Burlington (town).....	1
Elkton.....	1	Rensselaer County—	
Dorchester County—		Troy.....	2
Crocherson.....	1	St. Lawrence County—	
Kent County—		Ogdensburg.....	1
Queen Anne, R. D.....	1	Saratoga County—	
Somerset County—		Saratoga Springs.....	1
Marion.....	1	Schenectady County—	
Pocomoke City, R. D.....	2	Glenville (town).....	1
Washington County—		Schoharie County—	
Hancock.....	1	Fulton (town).....	1
Hagerstown.....	1	Schuyler County—	
Wicomico County—		Watkins.....	1
Pittsville.....	1	Seneca County—	
Total.....	16	Seneca Falls.....	1
<b>Michigan:</b>		Suffolk County—	
Bay County.....	1	Islip (town).....	1
Genesee County.....	1	Sullivan County—	
Huron County.....	2	Rockland (town).....	1
Mecosta County.....	1	Ulster County—	
Midland County.....	2	Saugerties (town).....	1
Saginaw County.....	1	Wawarsing (town).....	1
St. Clair County.....	1	Washington County—	
Washtenaw County.....	1	Whitehall.....	1
Wayne County.....	12	Westchester County—	
Wexford County.....	2	Mt. Vernon.....	1
Kent County.....	1	Total.....	50
Total.....	25	<b>West Virginia:</b>	
<b>New Mexico:</b>		Barbour County.....	1
Bernalillo County.....	1	Berkeley County.....	1
Chaves County.....	1	Braxton County.....	1
Otero County.....	3	Brooke County.....	1
Rio Arriba County.....	2	Cabell County.....	2
San Miguel County.....	1	Fayette County.....	3
Taos County.....	1	Greenbrier County.....	1
Total.....	9	Kanawha County.....	5
<b>New York:</b>		Marion County.....	5
Albany County—		Marshall County.....	1
Albany.....	1	Mercer County.....	3
Broome County—		Mingo County.....	4
Binghamton.....	1	Nicholas County.....	1
		Ohio County.....	2
		Putnam County.....	2
		Raleigh County.....	1
		Randolph County.....	4
		Wayne County.....	2
		Total.....	40

## TYPHOID FEVER—Continued.

## City Reports for Week Ended Mar. 6, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md.	1		Lawrence, Mass.	1	
Boston, Mass.	1		Los Angeles, Calif.	7	
Charleston, S. C.	1	1	Milwaukee, Wis.	1	
Chattanooga, Tenn.	1		Nashville, Tenn.	1	
Cincinnati, Ohio.	1		New Orleans, La.	2	
Cleveland, Ohio.	1		New York, N. Y.	5	1
Colorado Springs, Colo.	1		Oakland, Calif.	2	
Covington, Ky.	1		Philadelphia, Pa.	5	1
Duluth, Minn.	1		Richmond, Va.	1	
Fall River, Mass.	1		San Francisco, Calif.	2	1
Grand Rapids, Mich.	1		Toledo, Ohio.	1	1
Independence, Mo.		1	Troy, N. Y.	2	
Ironton, Ohio.	1		Watertown, N. Y.	1	
Kansas City, Mo.	1		Wheeling, W. Va.	1	

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

## City Reports for Week Ended Mar. 6, 1920.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Aberdeen, S. Dak.	15,926	3	1		7		11			
Aberdeen, Wash.	21,392				1					
Akron, Ohio.	93,604	42	4		65		133		41	
Alameda, Calif.	28,433	11			22		2			
Albany, N. Y.	106,632				1		23		5	
Alexandria, La.	16,232	3								
Alexandria, Va.	17,939	3								
Alliance, Ohio.	19,581	9			5		2			1
Alpena, Mich.	13,365				7					
Alton, Ill.	23,783	4	2				1			
Amesbury, Mass.	10,200	4			3					1
Ann Arbor, Mich.	15,041	12	3		20		1		2	
Anniston, Ala.	14,326						1			
Ansonia, Conn.	16,954	4			15		1		1	1
Appleton, Wis.	18,005		1		3		4			
Arlington, Mass.	13,073	2	1		6		1		2	1
Asbury Park, N. J.	14,629	3			2					
Ashland, Ky.	12,195						1			
Ashtabula, Ohio.	22,008	4								
Atlanta, Ga.	196,144	105	1		22		1			4
Atlantic City, N. J.	59,515	17	4	1	52		1		3	1
Attleboro, Mass.	19,776	7		1	1		2		1	1
Auburn, Me.	16,607		1				2			
Aurora, Ill.	34,795	13								
Austin, Tex.	35,612	9	3							
Baltimore, Md.	591,637	272	31	3	138		60	1	51	31
Bangor, Me.	26,958		2							
Barberton, Ohio.	14,187	4			3	1				
Baton Rouge, La.	17,544	5			1		1			
Battle Creek, Mich.	30,159		1		19		16	1		
Bayonne, N. J.	72,204		3		1		2			
Beatrice, Nebr.	12,437	5								
Beaumont, Tex.	28,851	14							3	3
Bellefonte, N. J.	12,797				8				1	
Bellingham, Wash.	34,362				2		3			
Beloit, Wis.	18,547						12		1	
Berkeley, Calif.	60,437	13					2			
Beverly, Mass.	22,128	7								
Biddeford, Me.	17,760	8			4					1
Billings, Mont.	15,123	12			4		3			1
Binghamton, N. Y.	54,864	30	2		5				2	
Birmingham, Ala.	189,716	123	2		8		5	1	1	6
Bloomfield, N. J.	19,013	2	1		4		2			
Bloomington, Ill.	27,462	19	3				1		2	
Boise, Idaho.	35,951	1								
Boston, Mass.	767,813	294	42	3	236	2	51	1	46	24
Brazil, Ind.	10,472	8			1					

# DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS— Continued.

City Reports for Week Ended Mar. 6, 1920—Continued.

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Bridgeport, Conn.	124,724	40	2	1	4		6		4	5
Bristol, Conn.	16,318	11					1		1	
Brookton, Mass.	69,152	22	3	1	8		3		8	3
Brookline, Mass.	33,526	6	1		1		1			
Brunswick, Ga.	10,984	7					1		1	
Buffalo, N. Y.	475,781	199	51	7	66		8		26	16
Burlington, Iowa	25,144		1				3			
Burlington, Vt.	21,802	15	1		2				1	
Butte, Mont.	44,057	21	1				1		4	1
Cadillac, Mich.	10,158	7	1		8					1
Cairo, Ill.	15,995	11			9					
Cambridge, Mass.	114,293	37	5		12		2		8	4
Canton, Ill.	13,674	7								
Canton, Ohio	62,566	35	1	2	4		4		1	1
Cedar Rapids, Iowa	38,033						2			
Centralia, Ill.	11,838	5	1		1					
Charleston, S. C.	61,041	55	1							4
Charleston, W. Va.	31,060	6								
Charlotte, N. C.	40,759	11							5	
Chattanooga, Tenn.	61,575	33	1		3		2		1	5
Chelsea, Mass.	48,405	15								
Cheyenne, Wyo.	<sup>1</sup> 11,320	8			2				1	1
Chicago Heights, Ill.	22,863	7	2				4			
Chicago, Ill.	2,547,201	796	117	17	218	2	318	3	226	72
Chicopee, Mass.	29,950	11			1					
Chillicothe, Ohio	15,625	2								
Cincinnati, Ohio	414,248	200	10	3	173	10	73		26	12
Cleveland, Ohio	692,259	240	28	1	152	1	43		24	11
Clinton, Iowa	27,678						1			
Clinton, Mass.	<sup>1</sup> 13,075	6					1		1	
Coffeyville, Kans.	18,331	5			5				2	1
Coboes, N. Y.	25,292	9	1							
Colorado Springs, Colo.	38,965		2		4				10	
Columbia, S. C.	35,165	1	1		1				1	
Columbus, Ga.	26,306	15								
Columbus, Ohio	220,135	83	2	1	76	1	11		6	12
Concord, N. H.	22,858	14			40					1
Corpus Christi, Tex.	10,789	7			1				1	1
Cortland, N. Y.	13,321	6					1		1	
Council Bluffs, Iowa	31,838	17	1		4		4			3
Covington, Ky.	59,623	38	3		37		3			3
Cranston, R. I.	26,773	7	1				2		1	1
Cumberland, Md.	26,686	17			1		4		1	
Dallas, Tex.	<del>429</del> 738	51	10		1		1		19	4
Danbury, Conn.	22,931				11					
Danvers, Mass.	10,037				1					
Danville, Ill.	32,969	10			25		1		10	2
Davenport, Iowa	49,618		1				1			
Dayton, Ohio	128,939	54	2		51		13		1	
Decatur, Ill.	41,483	17	1		56					2
Dedham, Mass.	10,618	2			1		2		4	
Denver, Colo.	268,439	83	3	1	38		4			19
Des Moines, Iowa	104,052		2				4			
Detroit, Mich.	619,648	303	84	12	102	3	97	3	31	33
Dover, N. H.	13,276	7			1					
Dubuque, Iowa	40,096		3		1		1			
Duluth, Minn.	97,077	19			4		4		3	1
Durham, N. C.	26,160	20					3			2
East Chicago, Ind.	30,286	10		1						3
East Cleveland, Ohio	13,864		1		20		1			
Easthampton, Mass.	10,656	2			1		1		2	
East Orange, N. J.	43,761	6	1		22		2			
East Providence, R. I.	18,485		2							
East St. Louis, Ill.	77,312	15	2		24		2			3
Eau Claire, Wis.	18,887									
Elgin, Ill.	28,362	6	2		2		1		1	
Elizabeth, N. J.	88,839		4		65		4		4	2
Elkhart, Ind.	22,273	11			1		5			
Elmira, N. Y.	38,272	12			46				3	1
El Paso, Tex.	69,149	83	2		23	1	1			18

<sup>1</sup> Population Apr. 15, 1910.

# DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS— Continued.

City Reports for Week Ended Mar. 6, 1920—Continued.

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Englewood, N. J.	12,603	1			19					
Eureka, Calif.	15,142	14	1						1	2
Evanston, Ill.	29,301	8					2			
Everett, Mass.	40,160	10	2		12		1			
Everett, Wash.	37,205									
Fairmount, W. Va.	16,111		4							
Fall River, Mass.	129,828	63	6	1	13	2		1	7	4
Findlay, Ohio.	14,858	3			2					
Flint, Mich.	57,386	26	6				8			4
Fort Dodge, Iowa.	21,039	4			2					
Fort Scott, Kans.	10,564	8								
Fort Smith, Ark.	29,390				2					
Fort Wayne, Ind.	78,014	33	2	1			9			3
Fort Worth, Tex.	109,597	23					3		1	
Fostoria, Ohio.	10,959	4			27		1			
Freeport, Ill.	19,844	12					2			
Fremont, Nebr.	10,080	3								
Fremont, Ohio.	11,034	3	1		24		3			
Fresno, Calif.	36,314	18								2
Galesburg, Ill.	24,629	11								
Galveston, Tex.	42,660	11					2			1
Gardner, Mass.	17,534	14					4			4
Gary, Ind.	56,000	11	2		1		2			1
Geneva, N. Y.	13,915	5					1			
Glens Falls, N. Y.	17,160	8								
Gloucester City, N. J.	11,375		1		1					
Grand Rapids, Mich.	132,861	35	3		113		6		6	2
Granite City, Ill.	15,890	5	1		12		1		1	
Great Falls, Mont.	13,948	19					2			
Greeley, Colo.	11,942	2								
Green Bay, Wis.	30,017						1			
Greenfield, Mass.	12,251	4			8		2	1		
Greensboro, N. C.	20,171	12								
Greenwich, Conn.	19,594	9	10	2	1				1	1
Hackensack, N. J.	17,412	6			3					
Hammond, Ind.	27,016	9			13		2			
Harrison, N. J.	17,345		1						1	
Hartford, Conn.	112,851	38	10		6		8		6	
Haverhill, Mass.	49,180	19	3		44		3		1	
Hibbing, Minn.	17,550				2				1	
Highland Park, Mich.	33,559	9	4		45		5			2
Hoboken, N. J.	78,324	20	5		8				1	2
Holland, Mich.	12,459	8								
Holyoke, Mass.	66,503	16			23		6		2	
Hoquiam, Wash.	12,230						2			
Hot Springs, Ark.	17,680	19	2							4
Houston, Tex.	116,878	48	6		14		1			2
Hudson, N. Y.	12,898	1								
Huntington, Ind.	10,982	2					2			
Huntington, W. Va.	47,686	35					3			2
Hutchinson, Kans.	21,461				1					
Independence, Kans.	15,111	9			1				1	1
Indianapolis, Ind.	283,622	99	2		132		10		10	9
Ironton, Ohio.	14,079	5							1	
Ironwood, Mich.	15,095	10					2			
Irrvington, N. J.	16,710				9					
Ishpeming, Mich.	12,448	4								
Ithaca, N. Y.	16,017	6			1		1			
Jacksonville, Ill.	15,506	8			4					
Jamestown, N. Y.	37,431	5	1		7					
Janesville, Wis.	14,411	6			7		1			
Jefferson City, Mo.	13,712	6								1
Jersey City, N. J.	312,557		6		50		7		12	
Joplin, Mo.	33,400	5							1	
Kalamazoo, Mich.	50,408	30	2		2		2		3	
Kankakee, Ill.	14,270	7								
Kansas City, Kans.	102,096		5		17		4			
Kansas City, Mo.	305,816	105	6		42	2	11		11	8
Kearny, N. J.	24,325	13			7		4		1	
Keene, N. H.	10,725	3								
Kenosha, Wis.	32,833		1				4			

1 Population Apr. 15, 1910.

# DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS— Continued.

City Reports for Week Ended Mar. 6, 1920—Continued.

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Knoxville, Tenn.	59,112		9	1	69		1		6	6
Kokomo, Ind.	21,929	14			4		12			
Lackawanna, N. Y.	16,219	2					4		4	
La Crosse, Wis.	31,835				6					
La Fayette, Ind.	21,481	8			3		1			
Lancaster, Ohio	16,086	5	1		1		1			
Lawrence, Kans.	13,477	3					1			
Lawrence, Mass.	102,923	35	4	1	2		1		6	3
Leavenworth, Kans.	19,363	7	2		1		1			
Leominster, Mass.	21,365	2					3			
Lexington, Ky.	41,997	35			3				6	
Lima, Ohio.	37,145	12	2				1			
Lincoln, Nebr.	46,957	18			31	1	4			
Little Rock, Ark.	58,716				1		1			
Lockport, N. Y.	20,028	6					1			
Logansport, Ind.	21,338	11	1		18		3			
Long Beach, Calif.	29,163	17	1		7		2		1	1
Long Branch, N. J.	15,733	3			11				1	
Lorain, Ohio.	38,266	3			5				3	2
Los Angeles, Calif.	535,485	212	28		49		6		50	25
Louisville, Ky.	240,808	96	16	3	16		10		8	7
Lowell, Mass.	114,366	68	2				3		6	5
Ludington, Mich.	10,566	6					1			
Lynchburg, Va.	33,497	14							2	1
Lynn, Mass.	101,531	40	4	2	3					
Madison, Wis.	31,315		1		9		18		3	1
Malden, Mass.	52,243	14					1			
Manchester, Conn.	15,859	1								1
Manchester, N. H.	79,607	31	6	2	5	1			6	3
Manitowoc, Wis.	13,931						10			
Mankato, Minn.	10,365	4			3					
Marion, Ind.	19,923	13			43	1	2			2
Marion, Ohio.	24,129		3		1		3			
Martinsburg, W. Va.	12,984	1		1						
Mason City, Iowa.	14,938	6	1		1					
Mattoon, Ill.	12,764				6					
Medford, Mass.	26,681	9	2		5		4		3	
Melrose, Mass.	17,724	3			19		2			
Memphis, Tenn.	151,877	55	4		2				4	8
Meriden, Conn.	29,431		3		8		3			
Methuen, Mass.	14,320	3	1		1		1			
Middletown, N. Y.	15,890				1		7			
Middletown, Ohio.	16,384	4								1
Milwaukee, Wis.	445,008	101	24	3	37		34	2	28	8
Minneapolis, Minn.	373,448	95	10		44		22		7	7
Mishawaka, Ind.	17,083				44		1		1	
Missoula, Mont.	19,075	4					1			
Mobile, Ala.	59,201	26	2				1			5
Monmouth, Ill.	10,346	7								1
Montclair, N. J.	27,087	5	2		1		1		1	
Montgomery, Ala.	44,039	35					1			
Morgantown, W. Va.	14,444	4							1	1
Morristown, N. J.	13,410	6								
Moundsville, W. Va.	11,513	2			6		1			
Muncie, Ind.	25,653	10	5		57		2			1
Muscatine, Iowa.	17,713	8					2			
Muskogee, Okla.	47,173				2					
Newark, N. J.	418,789	132	29	1	253	2	23		31	14
Nashville, Tenn.	118,136	58	1				7		4	3
New Bedford, Mass.	121,622	53	2		2		10		5	5
New Britain, Conn.	55,385	21	3	1	2		7			
Newburyport, Mass.	15,291	9	1							
New Haven, Conn.	152,275	69	12	1	46		6		5	2
New London, Conn.	21,199		1		28					1
New Orleans, La.	377,010	205	3	1	1		10	1	33	24
New Philadelphia, Ohio.	10,133		1		3					
Newport, R. I.	30,585	10							1	
Newton, Mass.	44,345	12	1		23		3		2	1
New York, N. Y.	5,737,492	1,712	300	28	1,589	29	133	3	318	153

<sup>1</sup> Population Apr. 15, 1910.

# DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS— Continued.

City Reports for Week Ended Mar. 6, 1920—Continued.

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Niagara Falls, N. Y.	38,466	26	4	—	112	4	1	—	—	—
Norfolk, Va.	91,148	—	2	—	—	—	1	—	—	—
North Adams, Mass.	122,019	16	1	—	—	—	2	—	—	—
Northampton, Mass.	20,006	13	—	—	2	—	—	—	1	—
North Attleboro, Mass.	11,248	5	—	—	—	—	3	—	—	—
North Little Rock, Ark.	15,515	—	—	—	—	—	—	—	2	—
North Tonawanda, N. Y.	14,060	9	1	—	1	—	1	—	1	—
Norwalk, Conn.	27,332	9	—	—	1	—	1	—	2	1
Norwich, Conn.	21,923	8	—	—	1	—	—	—	—	2
Norwood, Ohio.	23,269	—	—	—	8	—	3	—	—	—
Oakland, Calif.	266,405	67	2	1	38	4	1	—	2	3
Oak Park, Ill.	27,816	15	3	—	1	—	1	1	1	—
Ogden, Utah.	32,343	7	2	—	2	—	1	—	—	—
Oklahoma City, Okla.	97,588	20	—	—	50	—	—	—	—	1
Olean, N. Y.	16,927	12	—	—	—	—	—	—	—	—
Omaha, Neb.	177,777	53	4	—	41	—	27	—	—	4
Orange, Conn.	14,393	8	1	1	5	—	—	—	1	1
Orange, N. J.	33,636	15	8	—	6	—	—	—	1	1
Oshkosh, Wis.	36,549	—	1	—	11	—	—	—	—	—
Paducah, Ky.	25,178	—	—	—	9	—	—	—	—	—
Parkersburg, W. Va.	21,059	11	1	—	8	—	—	—	—	—
Parsons, Kans.	15,952	—	1	—	—	—	2	—	1	—
Pasadena, Calif.	49,620	11	1	—	5	—	—	—	6	—
Passaic, N. J.	74,478	22	4	—	10	1	—	—	7	4
Patterson, N. J.	140,512	12	10	—	65	—	2	—	8	—
Pawtucket, R. I.	60,666	24	2	1	—	—	—	—	—	2
Peekskill, N. Y.	19,034	6	—	—	—	—	—	—	—	—
Peoria, Ill.	72,184	30	3	—	—	—	5	—	—	1
Perth Amboy, N. J.	42,646	5	4	—	1	—	2	—	1	—
Petersburg, Va.	25,817	12	—	—	—	—	—	—	3	1
Philadelphia, Pa.	1,735,514	731	67	14	602	8	64	7	118	68
Phillipsburg, N. J.	15,879	2	—	—	—	—	1	—	—	—
Piqua, Ohio.	14,275	7	—	—	9	—	—	—	—	1
Pittsfield, Mass.	39,678	14	—	—	—	—	1	—	—	2
Plainfield, N. J.	24,330	—	—	—	1	—	—	—	2	—
Plattsburg, N. Y.	13,111	1	—	—	—	—	—	—	—	—
Plymouth, Mass.	14,001	8	—	—	—	—	—	—	—	—
Pontiac, Mich.	18,006	14	2	—	3	—	—	—	2	3
Port Huron, Mich.	118,863	11	—	—	5	—	—	—	—	—
Portland, Me.	64,720	46	1	—	1	—	—	—	—	1
Portland, Oreg.	308,399	88	3	—	6	—	8	—	11	3
Portsmouth, N. H.	11,730	—	—	—	2	—	3	—	—	—
Portsmouth, Ohio.	29,356	16	—	—	3	—	—	—	—	2
Portsmouth, Va.	40,693	36	5	—	1	—	1	—	1	2
Poughkeepsie, N. Y.	30,786	10	—	—	—	—	—	—	2	1
Providence, R. I.	259,895	112	23	—	23	3	12	1	—	11
Pueblo, Colo.	56,064	—	—	—	2	—	—	—	—	—
Quincy, Mass.	39,022	15	2	—	2	—	4	—	2	1
Racine, Wis.	47,465	—	1	—	19	—	11	—	—	—
Rahway, N. J.	10,361	1	—	—	—	—	—	—	—	—
Raleigh, N. C.	20,274	10	—	—	2	—	1	—	—	1
Redlands, Calif.	14,573	3	1	—	2	—	—	—	1	—
Reno, Nev.	15,514	4	—	—	12	—	—	—	—	—
Richmond, Ind.	25,060	12	6	1	14	—	—	—	1	—
Richmond, Va.	158,702	58	4	—	53	—	2	—	12	8
Riverside, Calif.	20,496	6	—	—	1	—	—	—	—	—
Roanoke, Va.	46,282	4	1	—	—	—	1	—	—	—
Rochester, N. Y.	264,714	82	25	1	116	—	7	1	13	10
Rockford, Ill.	56,739	18	—	—	—	—	10	—	2	—
Rock Island, Ill.	29,452	8	1	—	25	—	—	—	1	1
Rocky Mount, N. C.	12,673	8	—	—	—	—	—	—	1	—
Rome, Ga.	15,607	—	—	—	1	—	—	—	1	—
Rutland, Vt.	15,038	5	—	—	2	—	1	—	—	—
Sacramento, Calif.	68,984	26	—	—	21	—	1	—	1	3
St. Cloud, Minn.	12,013	—	1	—	—	—	—	—	—	—
St. Joseph, Mo.	86,498	34	1	—	—	—	4	—	—	2
St. Louis, Mo.	768,630	206	91	6	473	6	26	1	42	15
St. Paul, Minn.	252,425	60	21	3	21	—	4	3	8	2
Salem, Mass.	49,346	—	3	—	—	—	4	—	—	1
Salem, Oreg.	21,274	4	—	—	—	—	—	—	2	1

<sup>1</sup> Population Apr. 15, 1910.

# DIPHThERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS— Continued.

City Reports for Week Ended Mar. 6, 1920—Continued.

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Salina, Kans.	12,470	1	2				1			
Salt Lake City, Utah.	121,623	28			1				1	1
San Bernardino, Calif.	17,616						1			2
San Diego, Calif.	56,412	33	2	1	2		2		3	
Sandusky, Ohio.	20,226		1		4					
Sanford, Me.	11,217	0	1							
San Francisco, Calif.	471,023	169	27	3	306	3	16		31	10
Santa Cruz, Calif.	15,150	6			8					
Saratoga Springs, N. Y.	13,839	8							3	1
Sault Ste. Marie, Mich.	14,130	3			3		1			
Savannah, Ga.	69,250	57	1						3	2
Schenectady, N. Y.	103,774	15			18		6		2	1
Sheboygan, Wis.	28,907		3		13		9			
Sioux City, Iowa.	58,568						3			
Sioux Falls, S. Dak.	16,887	12	2		5		1			2
Somerville, Mass.	88,618	27	1		6		4		3	2
South Bend, Ind.	70,967	14			2		2		5	2
Southbridge, Mass.	14,465	2					1		1	
Spartanburg, S. C.	21,985	7	1				1			
Spokane, Wash.	157,656				13		1			
Springfield, Ill.	62,623	20								2
Springfield, Mass.	108,668	25	5	1	25		12		2	
Springfield, Mo.	41,169	21								
Springfield, Ohio.	52,296	13			2				7	
Stamford, Conn.	31,810				14		2			
Staunton, Va.	11,823	11								
Steubenville, Ohio.	28,259	10			4					
Stillwater, Minn.	10,198	1	2							
Superior, Wis.	47,167	14	2		52		1			
Syracuse, N. Y.	158,559	50	5				16		4	1
Tacoma, Wash.	117,446	2			8		2		1	
Taunton, Mass.	36,610	16								
Terre Haute, Ind.	67,361	24			29		7			
Tiffin, Ohio.	12,962	2			18					
Toledo, Ohio.	202,010	83	5		216		24		6	7
Topeka, Kans.	49,538	12	1		2				5	1
Traverse City, Mich.	14,090	2			6					
Trenton, N. J.	113,974	54	5				4		6	5
Troy, N. Y.	78,094	25	2		1					
Tucson, Ariz.	17,324	25								
Vallejo, Calif.	13,803	4	2							
Vancouver, Wash.	13,805		1				9			
Virginia, Minn.	15,954		4							
Waco, Tex.	34,015	16	1		2					1
Walla Walla, Wash.	26,067						1			
Waltham, Mass.	31,011	13	1	1			2		2	1
Washington, D. C.	369,282	141	12	1	1		19		27	7
Watertown, Mass.	15,188	4			1		5		1	
Watertown, N. Y.	30,404						1			
Wausau, Wis.	19,666	5			33				1	
Westfield, Mass.	18,769	6			2					
West Hoboken, N. J.	44,386	5	3	1	1				1	1
West New York, N. J.	19,613	5			7					
West Orange, N. J.	13,964	1	1		2					1
Wheeling, W. Va.	13,657	31	3		43	1			2	2
Wichita, Kans.	73,597	41	1				1		1	1
Wilmington, Del.	95,369	37	4		25		1			3
Winchester, Mass.	10,812	4			3					
Winona, Minn.	18,583	5			8					1
Winston-Salem, N. C.	33,136	15			1				6	1
Winthrop, Mass.	13,105	2			8		3			
Woburn, Mass.	16,076	8								
Worcester, Mass.	166,106	88	3				15		1	5
Yakima, Wash.	22,053				27		4			
Yonkers, N. Y.	103,066	26	4	1	23	1	1		2	8
Zanesville, Ohio.	31,320	20			1		3		1	2

<sup>1</sup> Population Apr. 15, 1910.

## FOREIGN AND INSULAR.

### PLAGUE ON VESSEL.

#### Steamship "Alps Maru"—Port of London.

A case of plague was reported February 28, 1920, at the port of London, England, occurring in a member of the crew of the steamship *Alps Maru*. The case developed six days after arrival of the vessel. The *Alps Maru* left Yokohama, Japan, December 3, 1919, for Hamburg, and was reported at Suez, Egypt, January 21, 1920.

### CUBA.

#### Communicable Diseases—Habana.

Communicable diseases have been notified at Habana as follows:

Disease.	Feb. 21-29, 1920.		Remain- ing under treat- ment Feb. 29, 1920.
	New cases.	Deaths.	
Bronchopneumonia.....	15	6	1
Cerebrospinal meningitis.....	4		17
Chicken pox.....	2		3
Influenza.....	23	6	27
Leprosy.....			10
Malaria.....	1		22
Measles.....	21		69
Paratyphoid fever.....			1
Pneumonia.....	2	2	
Scarlet fever.....	1		5
Smallpox.....	2	1	9
Typhoid fever.....	1		21

<sup>1</sup> From abroad, 6.

<sup>2</sup> From the interior, 11.

<sup>3</sup> From the interior, 9.

### ITALY.

#### Lethargic Encephalitis.

Lethargic encephalitis has been reported in Italy as follows: Province of Genoa, February 2 to 8, 1920, 13 cases; Leghorn, January 28 to February 23, 6 cases; Trieste, February 8 to 14, 1 fatal case.

### LUXEMBURG.

#### Lethargic Encephalitis.

During the period February 1 to 15, 1920, four cases of lethargic encephalitis were notified in the Grand Duchy of Luxembourg.

## SPAIN.

## Lethargic Encephalitis—Barcelona.

Information dated March 8, 1920, shows the occurrence of several cases of lethargic encephalitis at Barcelona, Spain.

## INFLUENZA.

The following information was taken from reports received during the week ended March 26, 1920:

Place.	Date.	Cases.	Deaths.	Remarks.
Arabia:				
Aden.....	Jan. 28-Feb. 3.....		1	
Belgium:				
Ghent.....	Feb. 8-21.....	162	11	
Bolivia:				
La Paz.....	Feb. 1-7.....	5		
Brazil:				
Santos.....	Dec. 29-Jan. 4.....		1	
Canada:				
Manitoba—				
Winnipeg.....	Feb. 2-21.....	155	30	
Nova Scotia—				
Halifax.....	Feb. 29-Mar. 6.....	13		
Ontario—				
Fort William and Port Arthur.....	do.....	11	5	
Hamilton.....	Mar. 7-13.....	78		
Toronto.....	Feb. 29-Mar. 6.....		26	Acute pneumonia; five deaths.
Windsor.....	do.....		1	
Quebec—				
Montreal.....	do.....			Present.
Saskatchewan—				
Regina.....	Feb. 22-28.....	36	2	
Saskatoon.....	Feb. 29-Mar. 6.....	12	7	
Canary Islands:				
Santa Cruz de Tenerife.....	Feb. 1-14.....			Present. Mild. Epidemic in various parts of the islands.
Ceylon:				
Colombo.....	Jan. 11-31.....		41	
China:				
Hankow.....	Jan. 25-31.....			Present.
Costa Rica:				
Port Limon.....	Feb. 22-Mar. 6.....		17	
Cuba:				
Cienfuegos.....	Feb. 22-Mar. 6.....	25	4	
Egypt:				
Alexandria.....	Feb. 5-11.....	47	5	
France:				
Marseille.....	Jan. 1-31.....		137	
St. Etienne.....	Feb. 1-15.....	15	7	
Great Britain:				
England and Wales.....	Feb. 15-21.....		161	In 96 great towns. Population, aggregate, 16,577,344.
London.....	do.....		37	Greater London and Outer Ring, 81.
Scotland.....	do.....		3	In 16 principal towns. With complications, 2 deaths. Population, 2,416,900.
India:				
Karachi.....	Jan. 25-Feb. 7.....	29	29	
Madras.....	Feb. 1-7.....		9	
Rangoon.....	Jan. 11-24.....		27	
Japan:				
Nagoya.....	Feb. 8-14.....		25	
Mexico:				
Guayamas.....	Feb. 1-20.....			Present.
Saltillo.....	Feb. 29-Mar. 6.....	6	6	
Tampico.....	Feb. 23-29.....		13	
Vera Cruz.....	Mar. 2-8.....		2	
New Zealand:				
Dunedin.....	Jan. 13-19.....	7		
Norway:				
Christiania.....	Feb. 8-14.....		3	
Spain:				
Tarragona.....	Feb. 1-7.....			Present.
Valencia.....	Feb. 15-21.....	2	2	

**CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.****Reports Received During Week Ended Mar. 26, 1920.<sup>1</sup>****CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks.
India.....				Dec. 21-27, 1919: Deaths, 2,243.
Bombay.....	Jan. 11-24.....	2	2	
Calcutta.....	Jan. 11-31.....	62	62	
Madras.....	Jan. 11-Feb. 7.....	9	1	
Rangoon.....	Jan. 11-17.....	1	1	
Straits Settlements:				
Singapore.....	Jan. 11-17.....	2	2	

**PLAGUE.**

Brazil:				
Bahia.....	Jan. 25-31.....	1	1	
Ceylon:				
Colombo.....	Jan. 18-31.....	5		
Egypt:				Jan. 1-Feb. 19, 1920: Cases, 46; deaths, 32.
Cities--				
Port Said.....	Feb. 13.....	1		
Suez.....	Feb. 1-15.....	1	1	
Province--				
Assiout.....	Feb. 7-17.....	20	7	10 pneumonic.
India.....				Jan. 11-24, 1920: Cases, 6,311; deaths, 5,047.
Bombay.....	Jan. 11-24.....	3	2	
Calcutta.....	Jan. 25-31.....	1	1	
Madras Presidency.....	Jan. 25-Feb. 7.....	1,609	1,177	
Madras.....	do.....	2	2	
Rangoon.....	Jan. 11-24.....	43	40	
Java:				
East Java.....				Jan. 1-7, 1920: Cases, 9; deaths, 9.
Surabaya.....	Jan. 1-7.....	9	9	
Peru:				
Trujillo.....	Jan. 26-Feb. 1.....	2	3	Including Salaverry.
Straits Settlements:				
Singapore.....	Jan. 11-17.....		1	
On vessel:				
S. S. Alps Maru.....	Feb. 28.....	1		At port of London, England, vessel left Yokohama, Japan, Dec. 3, 1919. Arrived at Suez, Jan. 21, 1920. Destination, Hamburg.

**SMALLPOX.**

Bolivia:				
La Paz.....	Feb. 1-7.....	2	8	
Brazil:				
Bahia.....	Jan. 18-31.....	102	77	
Santos.....	Jan. 5-18.....		2	
Canada:				
New Brunswick--				
St. John.....	Feb. 29-Mar. 6.....	7		
Nova Scotia--				
Sydney.....	Feb. 20-Mar. 6.....	4		
Ontario:				Feb. 28-Mar. 6, 1920: Cases, 150; deaths, 2. In 28 counties, 37 localities.
Hamilton.....	Mar. 7-13.....	5		
Kingston.....	Feb. 29-Mar. 6.....	5		
Peterborough.....	Feb. 22-Mar. 6.....	11	2	
Quebec--				Counties.
Bonaventure and Gaspé	Feb. 1-28.....	21		
Montreal.....	Feb. 29-Mar. 6.....	8		
Ceylon:				
Colombo.....	Jan. 11-31.....	3		
China:				
Chungking.....	Jan. 11-17.....			Present.
Egypt:				
Alexandria.....	Feb. 5-11.....	26	9	
India.....				Dec. 21-27, 1919: Deaths, 568.
Bombay.....	Jan. 11-24.....	27	8	
Calcutta.....	Jan. 11-17.....	658	571	
Karachi.....	Jan. 25-Feb. 7.....	16	6	
Madras.....	Jan. 11-Feb. 7.....	24	8	
Rangoon.....	Jan. 11-24.....	13	1	

<sup>1</sup> From medical officers of the Public Health Service, American consuls, and other sources.

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**

## **Reports Received During Week Ended Mar. 26, 1920—Continued.**

### **SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Italy: Messina.....	Jan. 26-Feb. 8.....	11	.....	Province, 35 cases, including San Fratello 5.
Naples.....	Feb. 9-15.....	5	5	
Japan: Nagasaki.....	Feb. 2-8.....	1	1	
Taiwan.....	Jan. 10-31.....	151	39	
Java: East Java.....	.....	.....	.....	Jan. 1-7, 1920: Cases, 1.
Surabaya.....	Jan. 1-7.....	1	.....	
Mesopotamia: Bagdad.....	Jan. 10-16.....	3	.....	
Mexico: Salina Cruz.....	Feb. 1-15.....	6	.....	
Tehuantepec.....	do.....	18	.....	
Newfoundland: St. Johns.....	Feb. 28-Mar. 5.....	•1	.....	
Portuguese East Africa: Towns—	.....	.....	.....	At four other localities. In interior, Dec. 28, 1919-Jan. 31, 1920.
Chinde.....	Dec. 28-Jan. 25.....	21	.....	
Inhambane.....	Jan. 4-17.....	3	.....	
Quelimane.....	Jan. 4-31.....	12	.....	
Siberia: Vladivostok.....	Dec. 19-31.....	17	3	
Spain: Valencia.....	Feb. 15-21.....	13	6	
Vigo.....	Jan. 25-31.....	.....	1	
Tunis: Tunis.....	Feb. 16-22.....	2	1	
Turkey: Constantinople.....	Feb. 18-24.....	5	3	

### **TYPHUS FEVER.**

Bolivia: La Paz.....	Feb. 1-7.....	4	2	
Brazil: Ceara.....	Jan. 4-10.....	1	.....	
Egypt: Alexandria.....	Feb. 5-11.....	4	2	
Japan: Nagasaki.....	Feb. 2-8.....	1	.....	
Siberia: Vladivostok.....	Dec. 25-31.....	23	13	
Turkey: Constantinople.....	Feb. 8-14.....	25	1	

## **Reports Received from Dec. 27, 1919, to Mar. 19, 1920.**

### **CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks.
China: Amoy.....	Nov. 4-17.....	.....	2	
Chosen (Korea): Chemulpo.....	Oct. 1-31.....	6	4	
Fusan.....	do.....	34	30	Oct. 20-Nov. 16, 1919: Cases, 3,525; deaths, 3,144. Aug. 15-Nov. 16, 1919: Cases, 15,192; deaths, 9,823.
Provinces—	.....	.....	.....	
Kelki.....	Aug. 15-Nov. 16.....	224	135	
Kogen.....	do.....	64	38	
Kokal.....	do.....	4,015	2,770	
North Chusei.....	do.....	1	1	
North Heian.....	do.....	3,196	2,434	
North Kankyo.....	do.....	497	275	
North Keisho.....	do.....	63	35	
North Zenra.....	do.....	1,326	692	
South Chusei.....	do.....	930	590	
South Heian.....	do.....	3,031	1,858	
South Kankyo.....	do.....	870	551	
South Keisho.....	do.....	318	156	
South Zenra.....	do.....	657	288	

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**

**Reports Received from Dec. 27, 1919, to Mar. 19, 1920—Continued.**

## **CHOLERA—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Greece:				
Saloniki.....	Oct. 10.....	1	1	
India:				Oct. 19-Dec. 20, 1919: Deaths, 21,145.
Bombay.....	Nov. 2-8.....	1	1	
Calcutta.....	Oct. 26-Dec. 27.....	181	106	
Do.....	Dec. 28-Jan. 3.....	11	9	
Madras.....	Nov. 23-Dec. 27.....	14	5	
Do.....	Dec. 28-Jan. 24.....	7	5	
Rangoon.....	Nov. 30-Dec. 27.....	12	9	
Do.....	Dec. 28-Jan. 3.....	1	1	
Indo-China:				
Saigon.....	Oct. 27-Nov. 23.....	5	4	
Japan:				
Kobe.....	Nov. 24-30.....	2	2	
Taiwan.....				For entire island: Oct. 22-Nov. 30, 1919: Cases, 651; deaths, 385.
Tokyo.....	Nov. 10-20.....	1	1	
Java:				
East Java.....				Oct. 5-11, 1919: One case, 1 death. At Pasoeroean.
West Java.....				Nov. 5-Dec. 23, 1919: Cases, 17.
Batavia.....	Nov. 5-Dec. 25.....	17		
Philippine Islands:				
Manila.....	Nov. 2-Dec. 27.....	29	10	
Provinces:				Nov. 2-Dec. 27, 1919: Cases, 1,574; deaths, 1,151.
Albay.....	Nov. 2-Dec. 27.....	339	240	
Ambos Camarines.....	Nov. 2-Dec. 20.....	66	34	
Antique.....	Nov. 2-Dec. 27.....	160	113	
Batangas.....	do.....	39	28	
Bohol.....	do.....	34	27	
Cagayan.....	Nov. 3-15.....	35	20	
Capiz.....	Nov. 2-8.....	6	5	
Cavite.....	Nov. 2-Dec. 6.....	25	16	
Cebu.....	Nov. 2-Dec. 20.....	28	14	
Davao.....	Nov. 9-15.....	6	4	
Iloos Notre.....	Nov. 2-29.....	42	40	
Iloos Sur.....	Nov. 2-22.....	18	15	
Iloilo.....	Nov. 2-Dec. 20.....	55	33	
Isabela.....	Nov. 2-Dec. 13.....	167	77	
Laguna.....	Nov. 2-Dec. 20.....	23	17	
Mindoro.....	Nov. 2-Dec. 6.....	81	30	
Mountain.....	Nov. 2-Dec. 13.....	6	4	
Occidental Negros.....	Nov. 2-Dec. 27.....	100	53	
Pangasinan.....	Nov. 20-Dec. 20.....	60	46	
Rizal.....	do.....	41	15	
Sorsogon.....	Nov. 2-Dec. 13.....	208	139	
Tarlac.....	Nov. 2-22.....	11	11	
Tayabas.....	Nov. 2-Dec. 27.....	60	35	
Union.....	Nov. 9-15.....	5	5	
Provinces:				Dec. 28, 1919-Feb. 7, 1920: Cases, 635; deaths, 412.
Albay.....	Dec. 28-Feb. 7.....	30	17	
Ambos Camarines.....	do.....	156	99	
Antique.....	do.....	191	42	
Batangas.....	do.....	19	12	
Cavite.....	Jan. 11-17.....	1	1	
Iloilo.....	Dec. 28-Jan. 3.....	9	2	
Isabela.....	Jan. 11-17.....	6	3	
Laguna.....	Dec. 28-Jan. 3.....	2	2	
Mindoro.....	Jan. 4-24.....	24	11	
Mountain.....	Dec. 28-Jan. 10.....	11	6	
Occidental Negros.....	Jan. 4-17.....	21	19	
Palawan.....	Jan. 11-Feb. 7.....	33	19	
Pangasinan.....	Dec. 28-Jan. 3.....	1		
Rizal.....	Feb. 1-7.....	3		
Samar.....	Jan. 4-24.....	44	30	
Sorsogon.....	do.....	51	40	
Tayabas.....	do.....	23	19	
Poland:				
Garwolin.....				Present in November, 1919.
Kowal.....				Do.
Stryl.....				Do.
Russia:				
Novorossisk.....	Nov. 8-11.....	3		
Odessa.....	Oct. 23-Nov. 7.....	93		
Siam:				
Bankok.....	Dec. 7-27.....	163	57	Oct. 5-Dec. 15, 1919: Deaths, 1,080.
Do.....	Dec. 28-Jan. 3.....	27	3	

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**

**Reports Received from Dec. 27, 1919, to Mar. 19, 1920—Continued.**

## **CHOLERA—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Straits Settlements:				
Singapore.....	Oct. 5-Dec. 27.....	15	14	
Do.....	Dec. 28-Jan. 10.....	2		
Sumatra:				
Deli.....	Oct. 1-31.....	1	1	

## **PLAGUE.**

Argentina:				
Rosario.....	Dec. 1-31.....		7	
Brazil:				
Bahia.....	Nov. 9-15.....	1	1	
Porto Alegre.....	Nov. 1-30.....		3	
Rio de Janeiro.....	Nov. 2-Dec. 27.....	9	4	
Do.....	Jan. 11-17.....	1		
British East Africa:				
Kisumu.....	Sept. 28-Nov. 1.....	6	6	Dec. 14-20, 1919: Present in vicinity.
Ceylon:				
Colombo.....	Oct. 26-Dec. 27.....	36	35	
Do.....	Dec. 28-Jan. 10.....	15	4	
Chile:				
Antofagasta.....	Dec. 8-11.....	1		
China:				
Hongkong.....	Dec. 7-13.....	1		
Ecuador:				
Guayaquil.....	Nov. 1-31.....	2		
Do.....	Jan. 1-31.....	8		
Egypt:				
Cities—				Jan. 1-Dec. 25, 1919: Cases, 867; deaths, 469.
Alexandria.....	Dec. 3.....	1	1	From vessel Rachid Pacha.
Province—				
Assiout.....	Nov. 15-21.....	30	17	
Do.....	Jan. 13-Feb. 4.....	9	9	
Greece:				
Saloniki.....	Oct. 6-Dec. 21.....	19	7	
Hawaii:				
Kaloha.....	Feb. 23.....	1	1	
India:				Oct. 19-Dec. 27, 1919: Cases, 31,542; deaths, 23,443. Dec. 28, 1919-Jan. 10, 1920: Cases, 6,701; deaths, 5,139.
Bombay.....	Oct. 19-Dec. 27.....	6	6	
Do.....	Jan. 4-10.....	1		
Karachi.....	Nov. 9-29.....	3	2	
Do.....	Jan. 11-17.....	2		
Madras Presidency.....	Nov. 9-Dec. 27.....	1,068	704	
Do.....	Dec. 28-Jan. 24.....	877	395	
Rangoon.....	Nov. 2-Dec. 27.....	29	27	Oct. 19-Nov. 1, 1919: Cases, 10; deaths, 7.
Do.....	Dec. 28-Jan. 10.....	15	15	
Indo-China:				
Saigon.....	Oct. 27-Dec. 7.....	11	9	
Java:				
East Java.....				Sept. 28-Dec. 31, 1919: Cases, 1,500; deaths, 1,499. Surabaya Residency.
Mesopotamia:				
Bagdad.....	Jan. 3-9.....	1	1	
Peru:				
Callao.....	Nov. 1-30.....		3	
Paita.....	Dec. 29-Jan. 17.....	23	17	
Salaverry (Trujillo).....	Nov. 23-Dec. 21.....	9	1	Present in surrounding country.
Do.....	Dec. 29-Jan. 24.....	17	5	And in vicinity.
Senegal:				
Dakar.....	Nov. 1-30.....		146	Including Dakar and vicinity.
Siam:				
Bangkok.....	Dec. 14-20.....	4	2	
Straits Settlements:				
Singapore.....	Oct. 26-Dec. 27.....	7	6	
Do.....	Jan. 4-10.....	2		
Syria:				
Beirut.....	Dec. 22.....	29		
Turkey:				
Constantinople.....	Nov. 14-Dec. 20.....	11		Present Dec. 11, 1919. Nov. 14-20, 1919: Present in vicinity.
On vessel:				
S. S. Kaiser-i-Hind.....	Nov. 28.....	3		At Port Said, Egypt. From Bombay, Nov. 15, for London.

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**

**Reports Received from Dec. 27, 1919, to Mar. 19, 1920—Continued.**

## **SMALLPOX.**

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Department—				
Algiers.....	Nov. 11-Dec. 31....	65		
Do.....	Jan. 1-20.....	55		
Constantine.....	Nov. 11-Dec. 31....	15		
Do.....	Jan. 1-20.....	32		
Oran.....	Nov. 11-Dec. 31....	90		
Do.....	Jan. 1-10.....	25		
South Territory.....	do.....	5		
Arabia:				
Aden.....	Dec. 24-30.....	1	1	
Do.....	Jan. 6-20.....		3	
Belgium:				
Brussels.....	Dec. 28-Jan. 3.....		1	
Bolivia:				
La Paz.....	June 29-Dec. 27.....		216	Dec. 29, 1918-June 28, 1919: Cases, 86; deaths, 44. Dec. 14-20, 1919: Cases, 7; deaths, 5.
Do.....	Dec. 28-Jan. 31....	17	22	
Brazil:				
Bahia.....	Oct. 26-Nov. 22.....	1,704	1,022	
Do.....	Dec. 28-Jan. 17.....	311	237	
Para.....	Feb. 8-14.....		2	
Pernambuco.....	Nov. 10-Dec. 28.....	123	9	
Do.....	Dec. 29-Jan. 11.....	82	4	
Rio de Janeiro.....	Sept. 28-Dec. 27.....	429	119	
Do.....	Dec. 28-Jan. 17.....		13	
Santos.....	Nov. 24-30.....		1	
Canada:				
British Columbia—				
Vancouver.....	Nov. 30-Dec. 6.....	1		
Do.....	Jan. 4-17.....	1		
Manitoba—				
Winnipeg.....	Jan. 11-17.....	2		
Nova Scotia—				
Halifax.....	Dec. 21-27.....	2		
Do.....	Jan. 4-Feb. 14.....	4		
Sydney.....	Dec. 7-13.....	1		
Do.....	Dec. 28-Feb. 28.....	16		
Counties—				
Cumberland.....	Dec. 14-20.....			Present.
Inverness.....	do.....			Do.
Pictou.....	do.....			Do.
Ontario.....				Nov. 1-29, 1919: Cases, 1,673
				Nov. 30-Dec. 6, 1919: Cases, 125,
				in 45 localities, exclusive of
				Dysart and Toronto. Dec. 1-
				31, 1919: Cases, 1,414; deaths, 2.
				Dec. 28, 1919-Feb. 28, 1920:
				Cases, 1,847; deaths, 30.
Fort William and Port				
Arthur.....	Jan. 25-Feb. 14....	5		
Gloucester County.....				Oct.-Nov., 1919: Cases, 3.
Hamilton.....	Dec. 14-20.....	3		
Do.....	Jan. 4-Feb. 21.....	23		
Kingston.....	Dec. 21-27.....	1		
Do.....	Dec. 28-Feb. 14....	6		
North Bay.....	Jan. 11-Mar. 6.....	4		
Ottawa.....	Dec. 14-20.....	1		
Do.....	Dec. 28-Feb. 28.....	16		
Peterborough.....	Dec. 21-27.....	3		
Do.....	Dec. 28-Jan. 31....	27		
Prescott.....	Jan. 4-10.....	1		
Sault Ste. Marie.....	Dec. 7-27.....	1		
Do.....	Dec. 28-Jan. 3.....	1		
Toronto.....	Dec. 7-27.....	727		
Do.....	Dec. 28-Feb. 28.....	773	5	
Windsor.....	Dec. 14-27.....	2		
Prince Edward Island—				
Summerside.....	Feb. 14-20.....	3		In one family.
Quebec—				
Bonaventure and Gaspé	Jan. 1-31.....	7		Counties.
Montreal.....	Dec. 7-27.....	3		
Do.....	Jan. 18-Feb. 20.....	6		
Quebec.....	Dec. 7-27.....	4		
Do.....	Jan. 4-Feb. 28.....	13		
Saskatchewan—				
Moosejaw.....	Dec. 28-Jan. 31....			
Saskatoon.....	Dec. 14-20.....	1		

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**

**Reports Received from Dec. 27, 1919, to Mar. 19, 1920—Continued.**

## **SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo.....	Nov. 16-Dec. 13...	10	9	
Do.....	Dec. 28-Jan. 3.....	1	1	
China:				
Amoy.....	Nov. 4-Dec. 22.....			Present. Dec. 22: Four deaths.
Do.....	Dec. 30-Jan. 5.....	1		
Canton.....	Nov. 2-Dec. 27.....			Present.
Do.....	Dec. 28-Jan. 10.....			Do.
Chungsha.....	Jan. 4-10.....	5		
Chungking.....	do.....			Do.
Do.....	Dec. 28-Jan. 10.....			Do.
Foochow.....	Nov. 16-Dec. 27.....			Do.
Do.....	Dec. 28-Jan. 24.....			Do.
Mukden.....	Jan. 18-24.....			Do.
Nanking.....	Dec. 6-27.....			Do.
Do.....	Dec. 28-Jan. 24.....			Do.
Shanghai.....	Dec. 22-28.....	2		
Chosen (Korea):				
Chemulpo.....	Dec. 1-31.....	1	1	
Fusan.....	Oct. 1-Dec. 31.....	12	1	
Seoul.....	do.....	19	4	
Colombia:				
Barranquilla.....	Nov. 16-Dec. 20.....	50	2	
Do.....	Jan. 11-Feb. 14.....		3	Stated to be epidemic, Jan. 18-24, 1920. About 200 cases, Feb. 1-14.
Cuba:				
Habana.....	Jan. 31.....	4		Children living in same house.
Egypt:				
Alexandria.....	Nov. 12-Dec. 16.....	32	22	
Do.....	Jan. 1-28.....	9	5	
Cairo.....	Oct. 1-Dec. 23.....	64	31	
Port Said.....	do.....	13	6	
Finland:				
Provinces.....				July 16-Dec. 31, 1919: Cases, 83.
Abo Oeh Borneborg.....	Nov. 1-15.....	1		
Nyland.....	July 16-Dec. 15.....	29		
St. Michael.....	Dec. 1-15.....	7		
Tavastehus.....	July 16-Dec. 31.....	7		
Vasa.....	Dec. 1-31.....	2		
Viborg.....	July 16-Dec. 31.....	37		
France:				
Paris.....	Jan. 1-10.....	1	2	
Germany.....				Oct. 5-15, 1919: Cases, 32. In addition to previously reported cases; Sept. 28-Dec. 6, 1919: Cases, 161 (exclusive of Prussia).
Prussia.....	Oct. 29-Nov. 29.....	1,100	323	
Greece:				
Saloniki.....	Nov. 10-Dec. 28.....	26	26	
Do.....	Dec. 29-Feb. 1.....	37	29	In vicinity: Drama, 1 case; Zagoritzani, 9 cases, 1 death; Serres, 1 case.
India.....				Oct. 19-Dec. 20, 1919: Deaths, 2,853.
Bombay.....	Oct. 12-Dec. 20.....	46	11	
Do.....	Dec. 28-Jan. 10.....	9	5	
Calcutta.....	Oct. 26-Dec. 27.....	188	260	
Do.....	Dec. 28-Jan. 3.....	124	106	
Karachi.....	Dec. 21-27.....	6	2	
Do.....	Jan. 18-24.....	4	4	
Madras.....	Nov. 2-Dec. 27.....	31	13	
Do.....	Dec. 28-Jan. 24.....	7	2	
Rangoon.....	Oct. 19-Dec. 27.....	51	18	
Do.....	Dec. 28-Jan. 10.....	11	6	
Indo-China:				
Saigon.....	Oct. 27-Nov. 23.....	2		
Italy:				
Genoa.....	Jan. 5-11.....	1		Province: Nov. 17-Dec. 28, 1919: Cases, 15; deaths, 3, Jan. 12-18, 1920: Cases, 13.
Leghorn.....	Jan. 4-10.....	1		
Messina.....	Nov. 10-Dec. 28.....	55	8	Province of Messina: Dec. 14-28, 1919: Cases, 68. Jan. 5-25, 1920: Cases, 85; 1 death.
Do.....	Dec. 29-Jan. 25.....	19	3	
Milan.....	Oct. 1-Nov. 30.....	12	2	
Naples.....	Dec. 28-Jan. 25.....	8	12	
Palermo.....	Dec. 27-Feb. 9.....	12	3	
San Fratello.....	Dec. 1-28.....	49	5	
Do.....	Dec. 29-Jan. 18.....	22	1	
Trieste.....	Jan. 3-10.....	2		
Turin.....	Dec. 28-Jan. 4.....	1		

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**

**Reports Received from Dec. 27, 1919, to Mar. 19, 1920—Continued.**

## **SMALLPOX—Continued**

Place.	Date.	Cases.	Deaths.	Remarks.
Japan:				
Kobe.....	Dec. 15-21.....	1		
Taiwan.....	Nov. 1-31.....	36	7	Entire island.
Do.....	Jan. 1-10.....	9	7	
Java:				
East Java.....				Sept. 28-Dec. 18, 1919: Cases, 34.
Residency—				
Surabaya.....	Oct. 25-Dec. 18.....	26		
West Java.....				Oct. 17-Dec. 25, 1919: Cases, 659;
Batavia.....	Oct. 17-Dec. 12.....	49	22	deaths, 151. Jan. 2-8, 1920:
Do.....	Jan. 2-8.....	1		Cases, 78; deaths, 10.
Mexico:				
Acapulco.....	Nov. 9-15.....	2		
Chihuahua.....	Dec. 21-27.....	3	3	
Do.....	Jan. 11-Feb. 15.....		1	
Ciudad Juarez.....	Jan. 11-Feb. 7.....		2	
Guadalaajara.....	Dec. 1-31.....			
Do.....	Jan. 1-31.....	1		
Mexico City.....	Nov. 16-Dec. 20.....	11		
San Luis Potosi.....	Dec. 14-20.....		1	
Do.....	Jan. 18-29.....		6	
Tehuantepec.....	Dec. 25-31.....	6		
Do.....	Jan. 1-31.....	34		
Newfoundland:				
St. Johns.....	Dec. 20-26.....	3		Dec. 13-26, at outports, 6 cases,
Do.....	Dec. 27-Feb. 27.....	12		Present at 8 other localities.
Panama:				
Colon.....	Dec. 15-21.....	1		Outports, Dec. 27, 1919-Feb. 20,
Portugal:				1920: Cases, 22. Present at
Lisbon.....	Nov. 30-Dec. 27.....		55	other localities.
Do.....	Dec. 28-Jan. 31.....		68	
Oporto.....	Dec. 7-20.....	5	5	
Do.....	Dec. 28-Jan. 3.....	1	1	
Portuguese East Africa:				
Lourenco Marques.....	Nov. 23-Dec. 20.....	9		Present in 5 districts Nov. 9-Dec
Districts—				20, 1919, with 56 reported cases,
Gaza.....	Dec. 7-13.....			Present.
Inhambane.....	.....			Do.
Mozambique.....	.....			Do.
Quellimane.....	.....			Do.
Tete.....	.....			Do.
Towns—				
Inhambane.....	Dec. 7-27.....	7		
Mozambique.....	.....	2		
Quellimane.....	.....	4		
Tete.....	.....	1		
Spain:				
Barcelona.....	Nov. 6-Dec. 27.....		26	
Do.....	Dec. 28-Feb. 3.....		26	
Bilbao.....	Nov. 1-Dec. 20.....		4	
Cadiz.....	Oct. 1-Nov. 30.....		6	
Valencia.....	Nov. 10-Dec. 27.....	39	9	
Do.....	Dec. 28-Feb. 14.....	56	6	
Vigo.....	Nov. 18-Dec. 27.....	14		
Do.....	Dec. 28-Jan. 3.....	2	2	Jan. 11-17, 1920: Present in
Sumatra:				vicinity.
Medan.....	Oct. 1-31.....	8		
Tunis:				
Tunis.....	Dec. 23-29.....	1		
Do.....	Jan. 19-Feb. 8.....	4	2	
Turkey:				
Constantinople.....	Nov. 9-Dec. 14.....	27		
Union of South Africa:				
Johannesburg.....	Oct. 1-Dec. 31.....	21		
On vessel:				
S. S. Roggeveen.....		1		Vessel from Java; at Noumea,
				New Caledonia. Case left at
				Noumea. Vessel arrived at
				Sydney, Jan. 2, 1920.
S. S. Sarcoxie.....	Dec. 23.....	1		At Ponta Delgada, Azores, from
				Rotterdam for New York.
S. S. Vestnorge.....	Jan. 15.....	1		Mild. At Kingston, Jamaica,
				from Philadelphia, via Nor-
				folk.

# CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 27, 1919, to Mar. 19, 1920—Continued.

## TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Departments—				
Algiers.....	Dec. 11-31.....	2		Algiers (city), Jan. 1-31, 1920: Cases, 1; deaths, 1.
Do.....	Jan. 11-20.....	1		
Constantine.....	Nov. 11-Dec. 31.....	2		
Do.....	Jan. 1-20.....	3		
Oran.....	Nov. 21-Dec. 11.....	5		
Austria:				
Vienna.....	Sept. 7-14.....	5		Sept. 7-Nov. 22, 1919: Cases, 17.
Belgium:				
Ghent.....	Jan. 25-31.....		2	
Bolivia:				
La Paz.....	June 29-Dec. 20.....	30	31	Dec. 29, 1918-June 28, 1919: Deaths, 52.
Do.....	Jan. 4-24.....	6	2	
Bulgaria:				
Sofia.....	Dec. 21-31.....	1	1	
Do.....	Jan. 1-10.....	2		
Varna.....	Feb. 18.....	110		
Vratza.....	Jan. 25-31.....			Present. Also in vicinity.
Canada:				
Ontario Province.....				Dec. 1-31, 1919: One case.
Chile:				
Antofagasta.....	Nov. 17-Dec. 14.....	14		
Santiago.....				Jan. 12-Sept. 30, 1919: Cases, 5,153; deaths, 1,023. Outbreak in October, 1918.
Valparaiso.....	Nov. 9-Dec. 27.....	955	114	Dec. 1-13, 1919: Cases, 700; deaths, 18.
Do.....	Dec. 28-Feb. 8.....	235	66	
China:				
Antung.....	Nov. 3-Dec. 14.....	2		
Czecho-Slovakia:				
Prague.....	Dec. 21-27.....	1		
Egypt:				
Alexandria.....	Nov. 12-Dec. 16.....	6	1	
Do.....	Jan. 1-Feb. 4.....	27	6	
Cairo.....	Oct. 1-Dec. 23.....	113	46	
Port Said.....	Oct. 1-Dec. 16.....	3	1	
Estonia:				
Narva.....	Feb. 16.....	2,500		Feb. 16, 1920: Cases, 7,500 to 8,000. Estimated mortality, 40 per cent.
Reval.....	do.....	2,500		
Finland:				
Province—				
Viborg.....	July 16-31.....	2		
Germany:				
				Oct. 5-Dec. 6, 1919: Cases, 10—civil population, 3; military, 4; repatriated soldiers, 3.
Great Britain:				
Belfast.....	Dec. 28-Jan. 3.....	1	1	
Glasgow.....	Nov. 30-Dec. 6.....	2		
Greece:				
Cavalla.....	Nov. 17-Dec. 28.....	4		
Drama.....	Nov. 24-Dec. 28.....	6		
Saloniki.....	Oct. 6-Dec. 21.....		43	
Do.....	Dec. 28-Feb. 1.....	11	1	In vicinity, at Vertekep, 4 cases; Zagoritzani, 1.
Thassos Island.....	Dec. 22-28.....	1		
Zihna.....	do.....	1		
Hungary:				
				Aug. 25-Sept. 14, 1919: Cases, 6.
Italy:				
Brindisi.....	Dec. 22-28.....	1		
Naples.....	Jan. 19-25.....	2	1	
Trieste.....	Dec. 14-27.....	3		
Do.....	Dec. 28-Feb. 3.....	5	2	
Venice.....	Nov. 17-Dec. 21.....	6	1	
Japan:				
Nagasaki.....	Dec. 1-28.....	4	2	
Do.....	Jan. 12-18.....	1	1	
Mexico:				
Chihuahua.....	Dec. 21-27.....	2		
Do.....	Jan. 11-17.....		1	
Mexico City.....	Nov. 16-Dec. 27.....	129		
Do.....	Dec. 28-Feb. 7.....	132		
Saltillo.....	Nov. 1-30.....	2	1	
San Luis Potosi.....	Dec. 14-27.....			Present.
Do.....	Dec. 28-Feb. 29.....			
Paraguay:				
Asuncion.....	Nov. 30-Dec. 6.....	1		Do.

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**

**Reports Received from Dec. 27, 1919, to Mar. 19, 1920—Continued.**

## **TYPHUS FEVER—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Peru:				
Callao.....	Nov. 1-30.....		1	
Cerro de Paseo.....	Dec. 7-13.....	1		
Poland.....				Nov. 1-30, 1919: Cases, 11,264; deaths, 942. Including Province of Posen.
Galicja (Province).....	Nov. 1-30.....	5,716	616	Oct. 1-31, 1919: Cases, 129; deaths, 12.
Warsaw.....	do.....	107	19	
Portugal:				
Lisbon.....	Dec. 6-12.....		2	
Oporto.....	Dec. 21-27.....	1		
Spain:				
Barcelona.....	Nov. 20-26.....	7		
Bilbao.....	Dec. 22-31.....		1	
Corunna.....	Nov. 24-Dec. 7.....	2		
Tunis:				
Tunis.....	Dec. 14-20.....	1		
Do.....	Dec. 29-Feb. 8.....	3	1	
Turkey:				
Constantinople.....	Nov. 14-Dec. 27.....	49		

## **YELLOW FEVER.**

Brazil:				
Bahia.....	Oct. 26-Nov. 8.....	1	2	
Mexico:				
Campeche.....	Dec. 20.....	1		
Merida.....	Dec. 7-27.....	4	2	
Do.....	Dec. 28-Jan. 31.....	1		The cases were sent from Opi-chen, vicinity of Muna. One death in case from Muna. Total to Dec. 27: Cases, 47; deaths, 21.